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CORPORATION
FINANCE

CORPORATION FINANCE

BY

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TO

J. LAURENCE LAUGHLIN

PREFACE

A RECENT computation showed $34,763,000,000 par value of securities issued by American railway and industrial corporations and now outstanding. These securities have been originally employed in obtaining capital for enterprises organized under the corporate form, or in enabling the owners of properties, or the promoters and financiers of new projects to realize their profits, or to distribute to the owners of corporations the accumulated profits of the past, or in exchange for other securities which it was found necessary to retire. The amount of income which these corporations receive is estimated at $4,572,000,000. An increasing share of American property is represented by stocks and bonds. An increasing proportion of American income is taking the form of interest and dividends.

The enormous and increasing values and profits represented by American business corporations have attracted general attention to corporate activities. The problem of corporation regulation is perhaps the leading issue of the day. Each of the leading political parties is committed to programs of corporation control, particularly in the field of public-service corporations. Many laws have been passed to supervise the activities of corporations, to control the administration of corporate income and expenses, and to limit capitalization. One of the most important elements of our eco-

nomic life, the business corporation, is being taken under the direct supervision of the Government.

"Corporation Finance" aims to explain and illustrate the methods employed in the promotion, capitalization, financial management, consolidation, and reorganization of business corporations. Of necessity, the treatment of this extensive subject can, in no part, be exhaustive. A volume as large as this could be, and I hope will be, written by investigators upon the subject outlined in each chapter. Neither have I attempted to deduce from the facts of Corporation Finance any new laws or principles. All that I have tried to do is to describe in as much detail as the subject permits, the methods employed in Corporation Finance, to indicate the working rules of procedure and management which govern these methods, and to show some of the dangers which lie in ignorant and careless financial management.

The treatment of the subject follows the natural line of corporation development. We begin with the investigation of a business proposition. Control of this proposition is secured by a promoter, a financial plan prepared, the coöperation of bankers secured, and the securities are sold. The next group of problems encountered relate to the management of the corporate income in order that a regular rate of distribution of profits may be made by the directors to the stockholders. The methods of obtaining new capital, directly by the sale of securities and indirectly by consolidation with other companies, are then examined. The last part of the book deals with the procedure in corporation bankruptcy, and with the reorganization of the capital accounts of both solvent and insolvent corporations.

The material of the book has been mainly taken from the

Commercial and Financial Chronicle. Much of the material has been included in the text in its original form. I have reproduced three chapters from my "Trust Finance" entire, and have made large use of the lectures on Corporation Finance delivered in the Harvard School of Business Administration in 1908–1909. I have to especially acknowledge my indebtedness to my friend Dr. Thomas Conway, Jr., of the Wharton School staff, who has rendered to me valuable assistance throughout the preparation of this book, of which I desire to record my grateful appreciation. I wish also to thank Mr. H. Edgar Barnes, of the Philadelphia Bar; Mr. Ben Loeb, of Sutro Brothers and Company, New York; Mr. Milton W. Lipper, of Arthur Lipper and Company, New York; Mr. Roland L. Taylor, of the Philadelphia Trust, Safe Deposit and Insurance Company; and Mr. George Stevenson, of Sailer and Stevenson, Philadelphia, for advice, suggestions, and assistance. I wish that space permitted me to record the names of a large number of my friends and acquaintances who have placed their time at my disposal. Mr. Albert Hill and Mr. A. W. Taylor have greatly helped me in the work of revision and proofreading.

I have inscribed this book to Professor J. Laurence Laughlin, of the University of Chicago, as a tribute of my appreciation of his work as a teacher.

E. S. M.

PREFACE TO SECOND EDITION

In the second edition of Corporation Finance a place has been made for a discussion of the problem of Capitalization, the chapter on Holding Companies has been rewritten in the light of the recent decisions by the Supreme Court by which the Oil and Tobacco combinations have been dissolved, and additional material on Sinking Funds has been included.

E. S. Mead.

PREFACE TO THIRD EDITION

In the third edition of Corporation Finance in place of the discussion of the Promotion of the Trust has been inserted a brief summary of the nature and the structure of the business corporation. Chapters IV and V on the Materials of the Financial Plan, have also been enlarged and in Chapter XXIX the discussion of the financial development of the holding company and the methods of its regulation has been amplified.

E. S. Mead.

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CHAPTER I

INTRODUCTION

Every day of the year numerous opportunities for the production of wealth are being brought forward, deposits of minerals are discovered, franchises obtained, patents granted. Railway extensions are constantly bringing new land, timber, and coal into the market. Increasing population offers a basis for water, light and transportation plants. New inventions stimulate new wants, and these wants in their turn produce new means of satisfaction. In 1900, the production of bituminous coal in the United States was 172,600,000 tons; in 1908, eight years later, this amount had more than doubled, rising to 352,500,000 tons. The production of pig iron, which accurately shows the increase in the construction of the "plant" of society, during the same period increased from 13,600,000 tons to 25,780,000 tons, and the production of steel increased in practically the same ratio. The production of lumber in thousand feet during the seven years from 1900 to 1907 rose from 34,800,000 to 40,300,000.

This enormous increase in the production of fuel and materials signifies not only rapid growth in every department of industry but also a multiplication of the opportunities for money making of which producers have taken advantage. In the railway field, for example, the mileage of nearly every important railroad has shown a large increase within the decade mentioned. The Baltimore & Ohio, a typical trunk line railroad, in 1899, reported 2,047 miles of line, 45,764 cars and 954 locomotives, operating in a territory already developed. In 1908, the mileage had increased

to 3,992, the cars to 61,647 and the locomotives to 1,396. Ten years ago the Interurban Electric Railway was in its infancy; to-day, between seven and eight thousand miles of line are reported as in operation, a new industry having been created within the decade.

In every branch of industry the opportunities for making money are coming forward in endless variety. Take but one field, the production of power; we find here a vast range of opportunity for profitable investment. We have the mechanical forced draft and the mechanical stoker, the latter in a variety of types; the use of superheated steam to reduce condensation and increase the efficiency of the boiler; the steam turbine to utilize the direct pressure of the steam; and the various devices and compounds which are designed to purify the water before it goes into the boiler. In other divisions of the field of power we have the development of electric power transmission which enables electricity to be sent long distances at high tension with a comparatively small expenditure for copper wire, bringing into profitable operation a large number of water powers which, until recently, were wasted; and we have the use of the gas engine which is now being built in very large units. New inventions are also succeeding. The Thermos bottle, for example, supplies a definite want, and within one year it is reported that more than 700,000 of these were sold at high prices. In the department of building operation, the growing use of concrete for dwelling houses promises to revolutionize the industry. Everywhere, improvements, long since discovered, are now forcing themselves into general notice and use, and new improvements are attracting instant attention. Never before in the world's industrial history has man increased his conquest over nature at such a rapid rate and simultaneously in so many fields.

These opportunities for the production of wealth are opportunities for the investment of money, for the investment of money aids, either directly or indirectly, in the production of wealth. The investor buys $50,000 of railway bonds.

With the proceeds the railroad replaces a wooden trestle with a steel bridge. Over this bridge it can run a heavier train load, which it obtains by the lower rate which the decrease in operating cost resulting from the heavier train load makes possible. The lower rate enables the farmer to turn a part of his grazing land into wheat, and so eventually the $50,000 invested in the railway bonds has increased the supply of wheat on the world's market. This increased production of wealth was made possible by the purchase of the bonds which the investor bought because, out of their increased earnings, the railroad could pay him four per cent interest. Without investment increased production would be impossible. Upon the investor rests the responsibility of adding to the wealth of the world. As he directs his funds to railroads, cotton mills, irrigation, or shipbuilding, the productive energy of society is exerted in this or that field of enterprise.

This office of investment is variously performed. Men may invest or capitalize their own savings. The farmer devotes one thousand dollars, half the proceeds of his last wheat crop, to the purchase of nitrate fertilizer. The New England cotton manufacturer invests his surplus earnings in a South Carolina mill where cheap power, labor, and material invite development. The Bessemer steel maker adds an open hearth furnace to his equipment, and takes advantage of a local supply of scrap. The Pennsylvania coal operator or lumberman buys the cheap coal and timber land of the South. Every successful producer is continually devoting his surplus funds to enlarge his enterprise along lines with which he is familiar as competition compels or as opportunity presents for greater profits. The producer often branches out into other fields, as when the farmers of a locality erect a flour mill or a sawmill, or open a stone quarry, or a carriage maker engages in the manufacture of automobiles, or a railroad spends a portion of its surplus in purchasing a coal property on its line. By such investments producers extend their business out of their profits and with their own funds.

Every industry is constantly growing from within—as the biologists say, by intussusception—out of the profits of the past, and individual producers are making ventures of their money into untried fields in enterprises where they alone stand to win or to lose, and where they act from personal knowledge of the opportunity.

There is a second class of investors which may include some of the first class but whose members are actuated by different motives and who act in a different way. These persons are also in possession of surplus funds from the employment of which they wish to obtain a profit, and they are ready to buy the stock of any corporation which gives them the assurance of satisfactory returns. They are in the market for any securities which they consider to be safe and profitable investments. The members of this class are not, as a rule, in close touch with the industries whose securities they buy. A leather merchant invests in steel, a banker in railroads, a retail dealer in mining stock, not because he desires to identify himself with the business in which he invests, so far as to give it his close personal attention and to assist in its management, but solely that he may share in its profits. Included in this class are investment institutions and managers of trust funds, who take no active part in the numerous enterprises whose securities they hold and who may know, indeed, little or nothing about the business.

The importance of this vicarious interest in industry is steadily increasing. Production is each year being carried on on a larger scale, and it becomes increasingly difficult for a few men to combine a sufficient amount of capital for the inauguration of a new enterprise or the development of an enterprise already established. Twenty years ago a few thousand dollars would build a sawmill. A half dozen farmers, by combining their savings, could start in the lumber business. To-day a well-equipped sawmill may cost $100,000, and added to this may be the expense of perhaps twenty miles of railroad to reach the timber. The assistance of outside capital is becoming every year more

essential to the development of any industry or the exploitation of any resource.

A very good example is the Pennsylvania Tunnel Extension under Manhattan Island connecting New Jersey with Long Island. The primary object of this tunnel is to bring Long Island into direct touch with the congested district of Manhattan. The plan is this: The Pennsylvania Railroad Company owns a majority of the stock of the Long Island Railroad Company which completely dominates Long Island. Long Island is largely vacant territory. If Long Island can be brought into direct contact with Manhattan, a large number of people will move from Manhattan into Long Island, they will increase the population of the towns of Long Island, manufacturing enterprises will spring up along the lines of the Long Island Railroad, and a dense population will at no distant date be settled in the eastern end of the Island. The Long Island Railroad will supply the means of transportation to this population, and the Pennsylvania will profit from the dividends on its interest in the Long Island Railroad Company, and also because to the Pennsylvania will come the transportation of most of the freight which that large population will use. Then there is some advantage, though very slight, from the passenger traffic west-bound from Long Island, and also a certain advertising value connected with the building of a beautiful terminal in the center of Manhattan. This is a very large enterprise. While its outlines are clear and its success is assured, it could not be carried through out of the profits of the Pennsylvania Railroad. For the completion of the work which will cost over one hundred million dollars, the Pennsylvania Railroad Company has raised a large amount of money through the sale of stocks and bonds. In order to get money together for large undertakings of this character, it is necessary to draw upon the funds of a large number of investors, and especially upon financial institutions: trust companies, insurance companies and savings banks, which are great reservoirs of investment funds.

The investor is appealed to to furnish funds for two classes of enterprises: those which are already in existence, and new enterprises which are to come into existence through the money he advances. The investor will not look up new schemes of investment for himself. He will, however, buy securities which are offered to him when they are properly presented, for the purpose of increasing his interest on his capital. The proprietors of this outside capital know little about the technical aspects of the industries into which they put their money. They are acquainted with these industries merely as sources of profit. If they can be given satisfactory assurances that profits will be forthcoming from a proposed development, they are willing to invest money to that end. They will not, however, devote themselves to searching out and preparing the propositions into which, when once discovered and prepared, they are willing to put their money.

This attitude of the general investor brings forward the promoter whose function in industry is that of discovering investment opportunities, forming companies to develop these opportunities, and selling the securities of those companies to obtain funds for development. The function of promotion involves three stages: first, the discovery of the proposition; second, the assembling of the proposition and third, the presentation of the proposition.

The work of the promoter may be explained by describing the promotion of two enterprises: a small coal company in Western Pennsylvania, and the industrial combinations, commonly known as "trusts," which have now absorbed a large portion of our productive industry.

Western Pennsylvania is underlaid with great sheets of bituminous coal. It contains one of the most important fuel reserves of the United States. The coal is generally of good quality, and it is accessible to the largest markets in the country. A large number of mining propositions, most of which have, since their inauguration, been consolidated under the ownership of a few corporations, have been developed in this region. The law gives the owner of land the right to

all the minerals which may be found beneath its surface. The land under which this coal lies is poor farming land, situated usually in narrow valleys intersected by streams which have excavated deep channels offering easy access to coal seams whose outcroppings are exposed on the banks and hillsides. This land is owned in tracts varying from ten acres up to three hundred acres. Many of the farmers mine coal for their own use and for local sale. A large number of "country banks" are found where, with primitive appliances, a considerable amount of coal is extracted. The sale of this coal is restricted to the immediate neighborhood since, in the absence of a large mining development, railway facilities would not be provided.

Such a region may attract the attention of bankers or capitalists who are interested in the development of coal properties, and they will organize a syndicate for its development. The syndicate will be organized, in much the same manner as a partnership association, under the terms of a syndicate agreement, whereby the subscribers associate themselves into an organization which it is agreed shall be managed by one or more of their number known as "Syndicate Managers," and agree to pay into a common fund a certain amount of money to be used in the development of a certain enterprise. Some part of this money may be borrowed by the syndicate; a larger amount is usually borrowed by the members. We shall, in a later chapter, consider the organization and administration of syndicates in detail; for our present purpose, this brief description will suffice. The syndicate having been organized, a call is made upon the members for a small percentage of their subscriptions for preliminary expenses. The syndicate is now ready for operation.

Some of their number will have received a considerable amount of information concerning the possibilities of the coal mining development under consideration, either from a local promoter or from some other source. The local promoter is usually a small lawyer or rural capitalist whose ambition outruns his means, and who may have spent some

money in preliminary surveys and examinations, the results of which are communicated to some banker or mining official who has command of the necessary capital, and who can, with his associates, develop the possibilities of the proposition. At this point, the promoter, usually so-called, namely the local man who has introduced the proposition to the capitalist, passes out of the narrative. He may be paid a certain amount of cash for the work he has done, or may be allotted a small interest in the syndicate, which secures him in the possession of a small amount of the stock which the company to be organized may issue. He is not apt to be a very important factor in the future development of the proposition.

Starting with this preliminary information, the syndicate now has a thorough examination made of the property which they propose to develop. Engineers are sent into the field to furnish the necessary technical information upon which the proposition must be based. From the reports of these engineers, it will be determined whether the coal seam is regular, or faulted and broken, requiring a large amount of expensive rock excavation for large development, also if the proposed mining operation will be self-draining, or if pumping machinery must be installed; the percentage of sulphur and silicon which the coal contains, its properties as a coking coal out of which a coke can be made which will stand up under heavy burdens in the blast furnace. Surveys will also be made of the proposed railroad without which commercial coal production is impossible. The cost of mining development and of railway construction will be determined as accurately as possible. At a cost of perhaps $5,000, the syndicate can gain approximately exact information concerning the physical features of the proposition.

In addition to the information received from technical experts, although engineers usually assume to work in this field also, the financial aspect of the proposition is carefully considered. In a thorough investigation of a coal mining proposition, the price per acre at which the land can be

purchased, the rate of freight charged by the connecting railroads, and the prices which can be obtained for this grade of coal in the different markets must be determined. Other considerations to be taken account of include the labor situation of the region, especially the strength of labor organizations, the laws of the State regulating the company store; and the attitude of the railroads toward a new mining enterprise—whether they will be helpful or indifferent.

After all this data has been gathered and collated, a decision may be reached to go forward, or the proposition may be abandoned because of the disclosure of unfavorable factors not revealed by the preliminary investigation on the basis of which the syndicate was organized. This initial investigation of a proposition, the disclosure of all the factors, favorable and unfavorable, affecting its ultimate success, must be thoroughly carried through or the enterprise is doomed to failure.

The countless disappointments in the development of new enterprises of all kinds are due, not so much to abuses of management or mistakes in capitalization, as to imperfect investigation reaching wrong conclusions as to business possibilities. So-called investigations made by local promoters are in most cases worthless. Their interests are so deeply involved in putting the best face possible on a scheme that both their observations and their deductions are of little value. Even the investigations of so-called "experts" are open to serious question. The expert's views are also colored by his interests since he is often, apparently, employed not so much to keep his principal out of an investment as to confirm his principal's judgment that the enterprise will be successful.

There is in the neighborhood of a large Eastern city a suburban railroad running out about twelve miles from a terminal station at the end of a city transportation line through a number of fashionable suburban towns, paralleling throughout its entire distance the main line of a large and well managed steam railway company. The fate of the company which constructed this line furnishes an excellent

illustration of the blunders into which supposedly competent investigators are likely to fall in examining a business proposition. The syndicate which promoted this enterprise and which completed it with its own money, no securities being offered to the public, employed engineers of high reputation to examine into the cost and traffic of the enterprise. The line was accurately surveyed, estimates were made of the cost of obtaining ground for a private right of way, and options were secured on a large amount of real estate for the development of suburban towns.

The engineers also addressed themselves to the possibilities of traffic for the new line based on the population then in existence. The experience of interurban railroads in the West, where the experience of these experts had been gained, has been that a high-speed interurban line divides traffic with the steam line. It is usually assumed that, from an estimate of the traffic on the steam line, it will be possible to approximate the number of passengers which will be drawn away to the electric road. The engineers in this case followed this method. They made careful computations of the traffic at each one of the stations on the line of railroad which their line was to parallel, and on the basis of this traffic they made an estimate of the traffic to be gained by the suburban line. Their estimates were accepted and the line was built, about three and a half million dollars being provided by the syndicate.

No sooner was the new line put into operation than it was discovered that the engineers had made serious blunders in their calculations. The people of the towns through which the new line ran were entirely satisfied with the service furnished them by the steam line which landed them in the heart of the city. The new suburban line, on the other hand, would only give them a connection with a city line, necessitating a change of cars at considerable inconvenience. The class of people who were expected to patronize the new road are well-to-do. To them, the advantages of saving a few cents in fare, and the more frequent service offered by the electric

line were of no consequence. The traffic of the new road proved a sore disappointment to its promoters. It failed from the beginning to pay its fixed charges, and for a time even its operating expenses were not earned. In 1908 its net deficit was $176,194. It has since been sold at less than one third of the amount of money invested in its construction; an expensive extension must be built to make it profitable; and it stands as a monumental blunder of supposed experts.

The difficulty in obtaining accurate information concerning the merits of the propositions which are brought to the attention and which arouse the interest of active men of affairs, has led to the development of a new type of promoter whom we will call, for lack of a better term, the promoting engineer. The promoting engineer is a firm or corporation engaged in the business of building trolley roads, power plants, railroads; doing all kinds of engineering and construction work within a certain field. They have a certain capital—the capital of some engineering firms runs into the millions—and they can borrow several times the amount from banks. They build up a permanent organization of engineers, chemists, accountants, and, in some cases, lawyers.

The engineering concern wishes to keep its organization constantly employed. Among its clients are bankers and capitalists who seek their advice on the merits of propositions. If their opinion is favorable, they are likely to obtain the engineering work. Usually, in such a case, they include the fee for investigation in their engineering commission. As a result of these inquiries and employments, the engineering concern in time advances to the investigation and presentation of propositions of their own. They have no lack of opportunities for independent effort of this kind. Large numbers of propositions are thrust upon them from which they can choose those which seem promising. If, after a preliminary investigation of a project, the engineers consider it worth undertaking, they secure the necessary options, and present the scheme to bankers and capitalists with whom they are connected.

A proposition submitted by an engineering concern of repute and authority in their chosen field will receive respectful attention from the banker who recognizes that the engineer's interest is not primarily to take part in the promotion, but to secure employment for himself and his organization, and to make his regular engineering profits. The engineer may also, in order finally to convince the banker, take part in the financing of the enterprise. He may acquire an interest in the syndicate which he proposes should be organized for its development. This interest the engineer will dispose of, should opportunity offer, even if he has to sell it at cost, either to the members of the syndicate, or to outside interests with the consent of the members of the syndicate. The engineer is not in the banking business, save incidentally and to obtain new business for himself. A usual condition of his participation in the flotation is that he should be given the supervision of the construction. The engineer may go a step farther and supervise the operations of the electric railway or gas plant during its initial stages. He assumes these duties, as a rule, with the cordial approval of the bankers. They are glad to secure, in this manner, an assurance of responsibility and competent management which the engineer is qualified to furnish.

The promoting engineer possesses advantages over any other kind of investigator, from the standpoint of the banker who advances the funds to make new enterprises possible, in that the engineer's interest is on the side of thorough investigation, economical construction, and careful management. Especially when the engineer shares the risks of the undertaking, is the banker glad to defer to his judgment and to invest money in the projects which the engineer indorses. There are a large number of engineering concerns of this character in the United States. One of the largest, the Stone & Webster Corporation of Boston, has gone so far as to develop a banking department in connection with its engineering work, through which it sells the securities of its own enterprises. The importance of thorough investigation

is now so generally recognized that alliances of this character between engineers and bankers may be expected to become general. They are usually found more satisfactory than when the engineer is employed by the banker in an expert capacity.

CHAPTER II

THE WORK OF THE PROMOTER

After the investigation is completed, if it is decided to proceed, the next step is to assemble the proposition. By assembling is meant the securing of control of the property or rights upon which the proposition must be based. There are two methods of getting a property under control. The first is to buy it and the second is to buy the right to buy it, in other words, to secure an option upon it. Outright purchase is for the promoter usually impossible, especially in the case of new enterprises which are to be financed by the sale of securities to investors. The money to develop the enterprise must first be obtained from bankers who will reimburse themselves by selling the securities to their customers. Bankers will not undertake to advance large amounts of money for the development of a scheme until there is a definite proposition put before them. They will not, for example, set aside $1,000,000 of their funds to develop a water power proposition until all the lands adjacent to the water power, and which are necessary for its development, have been secured. A part of this money the bankers may have to borrow. They will not undertake these responsibilities merely to encourage the promoters to make an earnest effort to get the proposition together. The promoters must give them definite assurances that all the property necessary is under their control before the bankers will tell them whether they are prepared to advance the necessary funds. As for the promoters themselves to purchase the property, even if they have the money, they cannot afford to risk it in

the purchase of resources whose development they may not be able to finance.

For example, in the coal land proposition which we have considered, to buy the 5,000 acres which is necessary, at $20 an acre, would require $100,000. Suppose this initial outlay to be made, and that the promoters find that, owing to the adverse conditions of the money market, or to some hitherto undiscovered imperfection in the project, bankers refuse to advance the necessary funds. They have $100,000 locked up in undeveloped property, which represents $6,000 a year in interest, a large part of which may have been borrowed, and they may be seriously embarrassed before they succeed, if indeed they ever succeed, in securing the funds for its development. Outright purchase of properties for the development of business propositions is not merely undesirable but unnecessary. The same result as purchase, so far as the promoters are concerned, can be reached by buying the right to purchase, in other words, by obtaining an option on the property which they desire.

An option is a privilege existing in one person, for which he has paid, giving him the right to buy certain realty, merchandise, or securities from another person within a certain time at a fixed price, or to sell such property to such other person at an agreed price or time. An option is, therefore, an unaccepted offer which runs for a definite time. It states the terms and conditions on which the owner is willing to sell or lease his property if the offeree elects to accept them within the time named in the option. If the holder of the option, known as the optionee, elects to accept the offer of the optionor, he must give notice to the optionor and the accepted offer thereupon becomes a binding contract. If an acceptance is not given within the time specified, the owner is no longer bound by his offer and the option is at an end. In effect, a man who grants an option on his property binds himself to make a contract to sell that property at a future time and to convey a good title. An option contract, like any other contract, is based upon a consideration.

This may be small; one dollar is a binding consideration. It is usual, if a substantial payment is made, to apply this on the purchase price if the offer of the optionor is eventually accepted.

The rights of the optionee in the property are those expressly named in the contract of option, and those which are implied from the terms of the contract. It is usual to give the optionee some right to enter upon and examine and sometimes even to take temporary charge of the property which he proposes to purchase. For example, in 1905, the Southern Railway Company and the Illinois Central Railway Company entered into a contract by which they purchased the prior lien bonds of the Tennessee Central and obtained options for three years upon the general mortgage bonds of the Tennessee Central, the bonds of the National Terminal Company and practically all the capital stock of this company except that held by counties and municipalities. Pending the acceptance or surrender of the option, they paid interest on the securities and operated the company under an agreement to keep it free from debt. The option expired July 1, 1908. The operation of the property had not been profitable, and the railroads surrendered their rights.

A privilege commonly given to the optionee, in the case of purchase of a going concern, is to have an exhaustive audit made of the books of the company to determine its profits for a term of years. For the protection of the optionee, it may be provided that the owner of the property shall do nothing which might impair its value, for example, that he must keep up the insurance, discharge all taxes, interest and mechanics lien obligations, and, in general, maintain the property in the condition which would render it available for the uses to which the optionee intends to put it in case he decides to exercise his rights under the option.

A valuable right connected with an option contract, from the standpoint of the optionee, is the right to assign the option. This is not implied but must be set forth in the option contract. If the right to assign exists, then the pro-

moter is in a position to deal to advantage with the proposed corporation. He can either obtain from the company the funds with which to purchase the property which he has under option, afterwards transferring it to the company in return for his agreed compensation, or he can assign his rights under the option contract to the company which can then take them up direct.

The remedy of the optionee, in case the optionor refuses to carry out his agreement to sell the property, on being notified by the optionee that he is prepared to take it, and after the purchase price has been tendered, varies according to the ownership of the property at the time. When the property remains in the possession of the optionor, the optionee's remedy is to go into a court of equity and ask for a bill of specific performance which the court, on proper showing being made, will issue, requiring the optionor to transfer the property. When the property has passed into the hands of an innocent third party, however, the only remedy of the optionee is a suit for damages. The measure of the damages may be the margin between the price named in the option and the present market value of the property. It is easy, however, to block such conversions by recording the option at the time it is created. The purchaser of the property is then chargeable with notice that certain rights against this property have been created in the option contract, and he takes it subject to a liability to have a bill for specific performance issued against him. The form of the option contract conforms with the requirements of any contract as to form and consideration; capacity of parties; and legality of object.

Having decided to option 5,000 acres of coal land owned by perhaps one hundred farmers, the syndicate sends an agent into the district, and visits these farmers at their homes. He explains his purpose to them, assures them that he will be able to raise the money to develop his proposition, and asks them, for the sake of their mutual interest, and for a nominal consideration in hand paid, to sell him an option to purchase

their property at any time within six months, at a price of, say, $20 per acre.

Various arguments may be employed to influence a general assent to this proposition. The landowners may be shown that the value of the surface soil, which will remain in their possession after the transfer of the coal, will be increased by the demands which a coal mining community will make for the produce of their farms. They may be offered the advantage of a railway which the opening of coal mines will bring. The hopelessness of developing their own property may be pointed out to them, and, as a last resort, the promoter may threaten to "sew them up" by refusing to transport their coal over his road. By employing such arguments, the promoter persuades the farmers to option or "lease" their land.

As far as possible, he keeps each owner in ignorance of the terms offered to his neighbors, for a general diffusion of such information would cause a general raising of prices. In dealing with the well-to-do and intelligent farmers, he must often pay a high price for the option, and the price named in their instrument is also high. The promoter submits to these onerous terms not merely because he wants the land of these hard bargainers who know just how indispensable their coal is to him, but also, and chiefly, because desires to use their names and influence with other owners. These higher prices are recovered in dealing with the more ignorant landowners, who are greatly impressed with the representations of the promoter, and also by the fact that their richer neighbors have joined the scheme. It may even be necessary for the promoter to employ coercion through an alliance with the general storekeeper who may hold chattel mortgages and judgment notes against the recalcitrants—powerful arguments when skillfully employed.

The proposition has now been assembled; the owners have obligated themselves to sell to the syndicate at a certain price until the expiration of the period named in the option. It is known how much the land and development will cost

and the land is under the syndicate's control. The next step is to finance the enterprise. At this point, a corporation is usually formed to take over the options. The bonds or stock of this corporation are taken by the syndicate whose members are now called upon to pay a substantial portion of their subscriptions. A portion of the necessary funds may also be borrowed, the securities being deposited as collateral for loans. With the money raised in this manner, the corporation, all of whose stock is owned by the syndicate, purchases the coal land, makes the development necessary, and starts the company as a going concern. After a record of earnings has been established, the securities of the company are usually offered for sale. If the enterprise has been wisely planned and economically developed, these securities may be sold at prices which will restore the syndicate's original investment, and either leave them in control of the stock of the company or enable them to sell out all their holdings of its securities at a profit.

This represents a typical promotion. Similar enterprises are constantly being promoted throughout the country, not only on mines, but on real estate, manufacturing enterprises, railroads, water powers, irrigation and timber projects. The details of each may vary from the form presented, but the essential principles are the same: (1) The securing of a right to purchase an opportunity to make money; (2) the capitalization of that opportunity at a higher figure than the price to be paid the original owner plus the funds required for development; and (3) the sale of the certificates of this capitalization to the investor, either directly or through the agency of middlemen, for a sum of money exceeding the amount necessary to purchase and develop the resource which it is intended to exploit. The difference represents the promoter's profit, a characteristic feature of corporation financiering.

What have the promoters done to entitle them to this large profit? They have produced no coal; that is done by the company to which they turn over their options. Nor

have they risked an amount of money in any way comparable to the profit which they have made. To obtain fifty options under the circumstances described may not have required an outlay of more than $5,000. Judged by the canons of what is generally considered to be legitimate money making, the promoters have done nothing to entitle them to the $70,000 profit which, out of a flotation of this importance, they frequently take. And yet the profits of the promoter are as legitimate as are the profits of any of the more familiar professions.

The promoter is a creator of value. He brings into existence a means of producing wealth which did not before exist. By combining the control of a number of separate pieces of coal property into a fully equipped coal-mining enterprise, he is able to offer to the investor an opportunity to earn say twenty per cent net on his money; in other words, to sell to the investor $500,000 worth of stock which can be depended on to pay dividends of ten per cent, for $250,000.

Without this combination, in the hands of individual owners, without transportation facilities, and without equipment, the value of this coal, based on its earning power from the small mines which produce for the local trade, did not exceed $20 per acre. Combined under one ownership, connected with a trunk line railroad, and equipped for large operations, a value of $100 per acre is not excessive. This increase in value of $80 per acre is the result of the investment of $35 per acre—$20 in the purchase of the coal and $15 in its development. Deducting the $35 which must be spent to put the coal on the market, there remains $65 per acre as the promoter's profit, which he may share with the banker and investor, a profit differing in no essential feature from the gains of the manufacturer who contracts ahead for his material and takes advantage of a rise in the market price of his product.

But, it may be objected, why should the promoter be allowed to make this large profit? Why should it not be

divided between the farmer who owns the land and the investor who furnishes the money? What is the justification for the promoter's profit? The answer to these questions lies in the nature of the transaction. Neither the owner nor the investor can do the work of the promoter, and they have, therefore, no claim to his profits. The farmers, save in exceptional instances, could not even organize their own proposition, much less finance it. Mutual jealousies, local feuds, and overmuch information about the character and financial standing of local individuals who might undertake this work interfere with any general agreement. It would be found next to impossible to agree upon the proper price for different prices of coal land. Farmer A, whose land lies near the creek, would insist upon a higher value for his property than farmer B, whose coal is less accessible; while B on his part might cite as a reason for disputing the justice of A's claim, the fact that his coal had been opened in several places while nobody knew that A had any coal on his property. Farmer C, who owned land across the right of way of the proposed railroad, and who therefore considered his coöperation indispensable, might insist upon a price of $150 per acre, which would probably disgruntle his less favored and jealous neighbors, and so defeat the scheme. The Brown family might refuse to go into any agreement with the Jones family, with whom one of the chiefs of the Brown clan may have had a lawsuit of some years' standing. Anyone of a number of similar causes which might be cited would be sufficient to prevent the concentration of control of these separate properties, which are of small value unless combined.

Some one interest acting exclusively for its own advantage, and dealing independently with each owner, is essential to the assembling of such a proposition. This interest may be local, and, as already noted, by means of local alliances the task of the promoter is made easier; but in most cases, the successful assembler of a proposition is the outsider who can pose as the man of wealth and connection,

and can reap his harvest of options during the pleasant weather of a first impression. It is the experience of promoters that an outsider of imposing personality, pleasing address, and experience in handling men has usually much greater success in securing options than even a local "squire" or other celebrity whose standing in the community may be of the best, but who is too well known to be allowed by his neighbors to make any large amount of money out of their property.

Even if the farmers succeeded in getting their proposition together in the control of a selected committee or individual, they would have great difficulty in securing a financial connection. They would have to provide for expert reports on the property, and then to open negotiations with some financial interests with whom none of their members would probably be personally acquainted. After securing an introduction, they would present their proposition, probably in a lame and halting manner, which would not show that they possessed a comprehensive knowledge of the importance of the property in question to the general coal market or of the cost and conditions of its development.

Since they would have no connection with the investing public, if the banker to whom they would naturally apply for the funds was sufficiently interested to examine the proposition and to determine its value, he might take one of two ways to further his own advantage. He would either prolong the negotiations until the local contingent lost heart and withdrew, trusting to his own ability to obtain the options for himself, or he would compel the representatives of the owners, if they desired his assistance, to accept a price not greatly exceeding the face of their options; in which event the financier would be the promoter one stage removed, and acting by deputy. It is evident, therefore, that the larger part of the promoters' profits on such propositions cannot ordinarily be saved by the original owners of the coal.

The proprietor of an undeveloped opportunity is seldom in a position to bargain to advantage for its sale. His best

course is to put his property in the control of some promoter at a fixed price and for a definite time, contenting himself with effecting a sale, not at the price which he thinks the property is worth, but at a price which will represent a fair return on his investment of brains or money. Any attempt on his part to promote his own scheme is likely to end in failure. The failure of inventors to make more money out of the sale of patents which have merit is probably due, more than to any other cause, to the fact that they insist upon an excessive interest themselves, and are unwilling to offer sufficient inducements to those who might otherwise promote the scheme.

It is equally impossible for the investor to secure the promoters' profits. The investor is looking for a security which will produce as large an income as is consistent with the safety of his principal. He is not likely to concern himself with the active management of these industries into which he puts his money. How much less likely is he, therefore, to abandon his regular business or profession and roam about the country in search of resources to develop. The investor, of necessity, assumes a receptive attitude. He is the customer to whom the promoter and financier offer their wares. He buys on his judgment, not so much of the merits of the proposition, as of the reputation of those who offer it for sale.

We must conclude, therefore, that the promoter performs an indispensable function in the community by discovering, formulating, and assembling the business propositions by whose development the wealth of society is increased. He acts as the middleman or intermediary between the man with money to invest in securities and the man with undeveloped property to sell for money. In the present scheme of production, the resource and the money are useless apart. Let them be brought together and wealth is the result. The unassisted coincidence of investment funds with investment opportunities, however, is uncertain. The investor and the land or patent or mine owner have few things in common. Left

to themselves they might never meet. But the promoter brings these necessary elements together, and in this way is the means of creating a value which did not before exist, and which is none the less a social gain because much of it is absorbed in the first instance by the promoter and the financier.

Our promoter has now proceeded in the flotation of his enterprise as far as he can go without assistance. He must now obtain money to take up his options, build his factory or railroad, and inaugurate his enterprise. He may obtain this money from the investing public to whom his appeal may be made directly, by published advertising, circular letters and agents. If the nature of his proposition permits, he will present it to bankers and ask them to purchase, or to agree to purchase, a sufficient amount of the securities of his new company to provide it with the money which it requires. In the United States it is a safe conclusion that in nearly all cases where the character of the proposition is such as to appeal eventually to the conservative investor, the promoter will approach bankers and endeavor to secure from them the funds which the new company requires. The bankers will purchase the securities with the expectation of selling them to the public, but, for the time being, the dealings are between the promoter and the banker.

A company has been incorporated which will hold title to the property with whose acquisition the promoter has occupied himself. This corporation will issue certain securities. These securities will be sold to the investor who will, in this way, furnish the money for the development of the enterprise.

CHAPTER III

THE BUSINESS CORPORATION

FROM this point we have to do with the corporation as an agency for the conduct of business enterprise. A comparison of the two forms of association effort, the partnership and the corporation, will show the advantages of the corporation.

The partnership is a voluntary contract between two or more persons by which they combine their property, skill and labor, in the transaction of business for their common profit. The corporation is an association of individuals authorized by the state, under an instrument called the charter or certificate of incorporation, to transact a particular kind of business, together with all kinds of business collateral or incidental to the main line of activity, and, in the transaction of this business, to buy, sell, lease, mortgage, employ, borrow, and lend, and in all respects, for the transaction of business, to act as a natural person.

The partnership being a contract between individuals, does not merge the identity of these individuals in the association. The corporation, on the other hand, is an association with a life, a personality, a will, and a reputation of its own, altogether apart from those of its members.

From this broad distinction arise a number of important differences between the corporation and the partnership as forms of working business organization.

First, as to the liability of the members. The partnership, "Jones, Brown and Robinson, Provision Dealers," consists of these three men, in their own proper persons, joined in a business relationship. The debts of the partnership are, therefore, the debts of each member of the partner-

ship up to the full extent of his resources, all of which, not merely his share of the partnership property, but his outside property as well, may be seized in execution and sold for the payment of partnership obligations. The "Jones, Brown, Robinson Company, Successor to Jones, Brown & Robinson," although its members are the same as the members of the partnership which it succeeds, stands between its own creditors and the outside resources of its members. These creditors, having dealt with and trusted the *Company* must look to the *Company* for payment. Since the company creditor does not recognize the individual members in the incurring of the debt, so he cannot leap over the company in the collection of the debt, and seize the houses, lands, or personal property of the members of the company, which they hold apart from their interest in the company itself. All that belongs to the company the creditor can seize and sell. Its members may lose every dollar they have put into the enterprise, but the remainder of their property they cannot lose, because of the business misfortunes of their company.

This is the "limited liability" of the corporation, which so strongly recommends this form of organization to the investor who looks for income with the minimum of responsibility. In a partnership, the investor must be always on guard lest some careless or fraudulent act of a fellow partner or trusted employee might involve the business in ruin, the effects of which might spread to his private resources. In the corporation, on the other hand, while the consequences of failure to stockholders are no doubt serious enough, yet these consequences do not overflow the boundaries of the company's assets. In some cases, as for example, National Banking Corporations, liability additional to the stockholders' interest in the company, is imposed upon them, but even here the amount of the liability is fixed and known, and the National Bank stockholder can estimate with exactness the extent of his liability in holding a form of investment which for this reason, however, is by no means highly regarded.

The second point of advantage of the corporation over

the partnership, is the respective lives of the two organizations. The partnership, being a group of men, Jones, Brown and Robinson, doing business as a group, can endure only so long as all of its members are alive, and so long only as each one remains solvent and willing to continue in business relations with his partners. The death of Jones, the bankruptcy of Brown, or the invalidism and consequent withdrawal of Robinson, each will operate to dissolve the partnership and conceivably to dissolve the business. It is true that enterprises have been conducted under the partnership form for many years, leaving, in the case of the Baldwin Locomotive Works, for example, four generations of partners, but this was due to the co-operation of several favorable factors, not always met with; prosperous business, harmonious relations between the partners, which resulted in provisions being made for the valuation and transfer of the interests of deceased partners, and the admission of valued employees into the partnership succession. The Baldwin Locomotive Works continued under the partnership form in spite of the disadvantages thereunto attaching. In 1909, moreover, the Baldwin Locomotive Works was incorporated.

In the absence of a similar conjunction of favorable circumstances, any business conducted by a partnership is liable to extinction. The heirs of a deceased partner, the creditors of a bankrupt partner, or one of the partners dissatisfied with his associates, may force, by legal proceedings, not merely a dissolution of the partnership but the sale of all the partnership assets even though the entire good will and most of the value of the unsold assets should be destroyed.

No such difficulty need be anticipated with the corporation. The life of the corporation, a life wholly separate from the lives of its members, can be projected by the terms of its charter, into perpetuity. No matter what may happen to the members, the life of the company goes on and on. Every member may die, every member may become individually insolvent, every member may withdraw from the association, and yet the life of the company will continue.

Sir William Blackstone, in his "Commentaries" has described the immortality of the corporation in a passage of singular force and beauty.

"In order to facilitate business and to increase production of wealth, there have been created by acts of the public power, running back to remote antiquity, associations for business, religious, governmental, and charitable purposes known as corporations. These artificial persons are called bodies politic, bodies corporate, or corporations, of which there is a great variety subsisting, for the advancement of rights and immunities, which, if they were granted only to those individuals of which the body corporate is composed, would upon their death be utterly lost and extinct. To show the advantages of these incorporations, let us consider the case of a college in either of our universities, founded for the encouragement and support of religious learning. If this were a mere voluntary assembly, the individuals which compose it might indeed read, pray, study and perform scholastic exercises together, so long as they could agree to do so: but they could neither frame, nor receive, any laws or rules of their conduct; none, at least, which would have any binding force for want of a coercive power to create a sufficient obligation. Neither could they be capable of retaining any privileges or immunities: for, if such privileges be attacked, which of all this unconnected assembly has the right, or ability, to defend them? And, when they are dispersed by death or otherwise, how shall they transfer these advantages to another set of students, equally unconnected as themselves? So also, with regard to holding estates or other property, if land be granted for the purposes of religious learning to twenty individuals, not incorporated, there is no legal way of continuing the property to any other persons for the same purposes, but by endless conveyances from one to the other, as often as the hands are changed. But when they are consolidated and united into a corporation, they and their successors are then considered as one person in law: as one person, they have one will, which is collected from the sense of

the majority of the individuals: this one will may establish rules and orders for the regulation of the whole, which are a sort of municipal laws of this little republic; or rules and statutes may be prescribed to it at its creation, which are then in the place of natural laws: the privileges and immunities, the estate and possessions, of the corporation, when once vested in them, will forever be vested, without any new conveyance to new successions; for all the individual members that have existed from the foundation to the present time, or that shall hereafter exist, are but one person in law, a person that never dies: in like manner as the river Thames is still the same river, though the parts which compose it are changing every instant."

The perpetual existence of the corporation gives it great advantages over the partnership. The corporation can enter into contracts, such as franchises or mortgages extending over many years. It can undertake programs of construction which may require a quarter century for their completion. It can offer to the investor a permanent as well as a safe resting place for his income seeking funds.

Connected with the advantage of perpetual succession which the corporation enjoys over the partnership is the advantage of transferability of interest. Any partner can force his way out of the association without the consent of his fellow partners, usually at the expiration of any year, or, at best, at the end of a short term of years, but no outsider can force his way in to replace the one who withdraws, without the consent of each one of the remaining partners. The partnership relation is so intimate, so personal, the partners are joined so closely together in their duties and responsibilities, that unanimous consent is rightly considered to be necessary before new members are admitted. This fact makes partnership interests generally unavailable for investment purposes. Even if the investor could get his money into the partnership, which is not, unfortunately, as difficult in many cases as it should be, he will find it far more difficult to get it out again. With the rapid growth in the scale on

which business is conducted and the consequent necessity of drawing money from a larger number of people for its capital equipment, this difficulty of transferring interests counts strongly against the partnership form of organization.

With the corporation, however, no such difficulty is experienced. The stock or ownership of the company is divided into shares and these shares are the personal property of those who hold them free from any limitation or restriction on the right of transfer. Any stockholder may sell a part or all of his stock to anyone whatsoever, and all of his fellow stockholders acting together, are powerless to prevent the admission into the association of the new member thus created. The way is thus opened for the free circulation of the investor's money from one corporation to another by the process of buying and selling stock interests.

The final advantage possessed by the corporation over the partnership is the advantage of representative government. In a partnership, each member of the firm is the agent of all the others. Each member can bind the firm. The partners are presumed by law to trust each other absolutely in the conduct of the business so that the words and acts of each partner have equal force with the words and acts of any other. This fact makes membership in a partnership, for any investor who is not in a position to give his personal attention to the business, extremely hazardous, since his entire fortune may be swept away by an ill advised or fraudulent course of action taken by the other partners without his knowledge. Personal attention to the affairs of a partnership by each of the partners is therefore essential, and, though this makes for the highest business efficiency where the partnership is harmonious and well organized, since the "eye of the master" is on every part of the business, yet it closely limits the number of members and therefore, the amount of money which can be placed at the company's disposal. In the nature of things, few can give their time and close personal attention to the conduct of a business.

In the corporation, on the other hand, we have a perfect

system of representative government. A group of individuals come together under the powers given them by the corporation law of the state and draw a certificate of incorporation. This instrument gives the name of the corporation, its objects, the amount of capital it is authorized to raise, the location of its principal office, the period of its duration, the names and post office addresses of the original subscribers and the amount of their several subscriptions, and any provision for the regulation and conduct of the affairs of the corporation. This instrument is recorded and filed with some state officer—in New Jersey, the Secretary of State—and the subscribers thereupon become a corporation.

The corporation now proceeds to organize by setting up its government which shall regulate its affairs. Immediately the principle of representation is applied. The stockholders select from their number certain directors or trustees to manage the business. This the law requires. There may be in time many thousand stockholders scattered all over the world, but few of these stockholders know anything about the business owned by the corporation of which they are the owners, save as they may, in time, receive dividend checks or when their voting proxies are solicited. It is impossible, even if it were desirable, that these stockholders should come together at frequent intervals to give their attention to the management of their business. So they delegate directors to represent them. The stockholders, both in the certificate of incorporation or charter, and in the by-laws or regulations supplementary to the charter, can lay down the fundamental laws by which they wish the business of the company to be governed; just as the sovereign people in their constitutional convention, change and add to the fundamental laws of the state by which the legality of every statute passed by the legislature must be tested. But having passed these laws, both people and stockholders, except on such matters they leave reserved for their own decisions, such for example, as the borrowing of money by the state; or the mortgaging of property to creditors, or the creation of new stock having

priority as to dividends over existing issues, by the private corporation; must leave the decision of questions of public or corporate policy to their elected representatives.

And even the directors are not supposed as directors to manage the routine of the business. For example, the General Corporation Act of New Jersey in section 12, provides that "the business of every corporation shall be managed by its directors who shall respectively be shareholders therein, they shall not be less than three in number, and except as hereafter provided, they shall be chosen annually by the stockholders, at the time and place provided in the by-laws, and shall hold office for one year and until others are chosen and qualified in their stead."

However, it is further provided that "every corporation organized under this act shall have a president, secretary and treasurer, who shall be chosen either by the directors or stockholders, as the by-laws direct, and shall hold their offices until others are qualified in their stead."

These officers and others who may be provided for in the charter or by-laws, manage the business of the company under the general supervision of the directors, who even though they may hold weekly meetings, can do little more, in reference to the routine management of the business, than to pass upon the reports of the managers.

In this universal application of the principle of representative government to corporation management, lies another safeguard for the investor. He cannot manage the business himself. He must turn it over to others to manage. These delegated representatives, however, are, in the fullest sense of the word, his trustees. The rules under which the trust is to be administered, are set down in the law of the state and in the charter and by-laws of the company, and for any deviation from these rules the directors are liable to the stockholders. The law requires corporation directors to give, and the vast number of prosperous corporations now in existence proves that directors do give to stockholders the benefits of honest, careful and diligent supervision of their affairs. In

the same way, directors receive from the administrative officers of the company, to whom they must delegate not only the routine of management but the initiation and carrying out of important policies of construction, consolidation, and expansion, faithful and intelligent service.

As the directors represent the stockholders and administer the affairs of the company in accordance with the constitution of the corporation, so the officers, as the executives, represent the directors. Both officers and directors have their spheres of activity exactly defined in the charter and by-laws supplementing the corporation law of the state, just as the public law lays down in minute detail the rules by which public officials must conduct the affairs of the state. And furthermore, just as the public legislators must go back at frequent intervals to the electors to give an account of their stewardship, so the corporation directors must obtain from their constituencies, the stockholders, at intervals of even greater frequency, approval of what they have done, and the right to continue in their positions of trust and responsibility.

The principles and methods of representative government as applied to corporation management are so flexible that they can be expanded to unite into the vast organization of the United States Steel Corporation, which has more than 110,000 stockholders, owning among them $868,000,000 of preferred and common stock of a corporation, which in 1913 mined 28,738,451 tons of coke, manufactured 14,087,730 tons of pig iron and 16,656,361 tons of steel ingots, whose total sales, in 1913, reached $796,894,299 and which employed 228,906 men receiving $207,206,176 in wages. This great corporation, with assets valued at $1,792,233,492, and with over three hundred thousand persons directly interested in its management either as stockholders or employees, is managed by a board of twenty-one directors, who are elected for three-year terms by the stockholders, and who in their turn elect the administrative officers of the United States Steel Corporation and the directors and officers of its subsidiary companies.

No matter how large the United States Steel Corporation

may grow, the representative form of government, extending through the directors and officers of the parent company down through the directorates and administration boards of the principal subsidiary companies and of the subsidiaries of these subsidiaries, can expand with the growth of the business. The Steel Corporation can indefinitely increase the number of its stockholders and the amount of the aggregate contributions to its capital, without impairing the efficiency of its organization.

It has been already shown that corporations are organized by incorporators under the provisions of a general corporation act, which states the procedure in organization and lays down in general the powers of the corporation, the rights of its members, and the powers and obligations of its directors and administrative officers. The corporation is in general authorized to act as a natural person for the transaction of the particular kind of business which it sets forth in its certificate of incorporation that it proposes to carry on. For the purposes of this business, including not merely the primary business such as, for example, steel-making, but any business contributory thereto, such as transportation or water supply, every corporation has, quoting from the New Jersey law, which closely resembles the corporation laws of other states, the following powers:

1. "To have succession, by its corporate name, for the period limited in its charter or certificate of incorporation and when no period is limited, perpetually.

2. "To sue or be sued in any court of law or equity.

3. "To make and use a common seal and alter the same at pleasure.

4. "To hold, purchase and convey such real and personal estate as the purposes of the corporation shall require, and all other real estate which shall have been bona fide conveyed or mortgaged to the said corporation by way of security, or in satisfaction of debts, or purchased at sales upon judgment or decree obtained for such debts; and to mortgage any such real or personal estate with its franchise; the power to hold

real and personal estate shall include the power to take same by devise or bequest.

5. "To appoint such officers and agents as the business of the corporation shall require, and to allow them suitable compensation.

6. "To make by-laws fixing and altering the number of its directors, and providing for the management of its property, the regulation and government of its affairs, and the transfer of its stock, with penalties for breach thereof not exceeding twenty dollars.

7. "To wind up and dissolve or be wound up and dissolved in manner hereafter mentioned."

In the remainder of this chapter the provisions of the corporation law will be briefly explained. Certain points, however, will be reserved for an extended discussion in the chapters following.

We have already discussed the perpetual existence of the corporation which is described in the foregoing enumeration of powers, as the right to have succession. The presumption, as the text of the law shows, is in favor of perpetual succession. Only when a definite number of years is named in the charter is any limitation placed on the life of the company.

Succession is by the corporate name. A corporation has the right to select any name with this single exception that it must not use a name so similar to that already chosen by another corporation as to create confusion. It must not call itself, for example, Peck Bros. Co., when Peck Bros. & Co. are in the same line of business. This would amount to appropriation of the good will of the second corporation. Good will is defined as trade reputation which is identified with a certain name. When a company has built up, through advertising and attention to the details of its product, a reputation in its field, the law protects it in that reputation. If a new company selling the same goods, attempts to select a name closely resembling the name already connected in the public mind with the goods it offers for sale, the new com-

pany will gain an unfair advantage of its predecessor and competitor.

The right to sue on behalf of the corporation is usually exercised by the directors and officers. The stockholders may, however, be granted this right but only in such cases when the directors have been appealed to in vain to sue in protection of the company's interest, or where the directors' interests in the matter in question are opposed to the interests of the corporation so that even if they did sue they would be suing themselves. The courts have always taken the position that the only way for a stockholder to act is through his representatives, the directors.

In connection with this right to sue and be sued, we come upon the personality of the corporation. The old theory of the corporation describes it as invisible, intangible, and existing only in contemplation of law. The modern theory looks upon the corporation as an association of individuals. The association, it is true, acts as a body but nevertheless consists of individuals, and retains the personality of the individuals. This element of personality appears in connection with the corporation's position in court. In contemplation of law, the corporation has a mind which it exercises with every corporate act, and that mind can direct the agents of the corporation to commit acts which may result injuriously to others. Although the acts are the acts of the agents, yet the corporation must answer for them, and if the acts are of a criminal nature the corporation must answer directly to the criminal law. The corporation is authorized by the law to act as a natural person. It is given the power of a natural person, and power cannot be separated from responsibility. The corporation also has a business reputation which may be injured by false statements, and for these statements the offender may be sued by the company and made to pay damages. In order to recover damages for alleged libel, the corporation must prove that its business reputation was damaged. It has no reputation apart from its business to be affected by libel.

In fixing the responsibility of the corporation for injuri-

ous acts, the courts have frequently encountered the defense that the acts complained of are in excess of the corporation's power, and that, in doing these acts which the law had not allowed it to do, the corporation had no existence and was not visible to the law. This defense, however, has always been overthrown by reference to the legal maxim that as a man cannot plead his own wrong-doing in his own defense, neither can a corporation escape liability from the acts of its agents by proving that it had specially forbidden its agents to commit those actions.

The use of the corporate seal is restricted to those contracts, mainly relating to the transfer of real estate, where it would be essential for an individual to use a seal. Under the old law, the corporation could act only under seal, but this no longer prevails.

The fourth power of the corporation is the right to hold real and personal estate and to mortgage such property. As a general rule, the power of a corporation to mortgage its property for the security of its debts is unrestricted. The method by which this is accomplished is indicated in detail in later chapters. The consent of the stockholders is ordinarily required. It is also unusual to find any prohibition in the right of the corporation to incur debt, secured or unsecured, and the promissory notes of the corporation, issued under the power of the corporation to incur debt, are protected by all the safeguards surrounding a negotiable instrument. The innocent holder for value of a corporation note, which on its face appears to be legal, will be protected against the corporation, even though the company receive no benefit by the issuance of the note, and although neither the corporation law nor the charter authorizes the company to borrow money.

The fifth general power of the corporation is the power to appoint agents. This power ordinarily rests with the directors but they may delegate it to the officers. The trading or manufacturing corporation has the same right as an individual trader or manufacturer to select its agents and impose conditions upon them.

The sixth power possessed by all corporations is the power to make by-laws. By-laws are rules of self-government which have already been compared to the constitution of the state. They are adopted by the stockholders of the corporation, who may, however, confer this power upon the directors. An example of an ordinary by-law:

"The treasurer shall keep full and accurate account of all receipts and disbursements on books belonging to the company and shall deposit all money and checks in the name and to the credit of the company, in such depositories as may be designated by the board of directors. He shall disburse the funds of the company as may be ordered by the board and receive vouchers for same. He shall render to the president and directors at the regular meetings of the board and whenever they may request, account of all his transactions. He shall, together with the president, sign all certificates of stock."

By-laws are constantly being changed and new ones added, with the development of the business. These alterations are usually under the control of the directors. A by-law relates solely to the relations between the members of the corporation. It has no reference to the corporation's relation to third parties who are not charged with knowledge of a by-law unless they have been notified. For example, if the by-laws of a corporation provide that the treasurer alone can borrow money, and the president, contrary to the provisions of this by-law, signs and negotiates a note of the company, the corporation can not escape the obligation to pay the note by pleading the absence of authority of its president to sign it.

A corporation by-law, adopted at the time of the organization of the company, has equal force with the provisions of the charter. It is a contract between the corporation and its stockholders and it can not be altered without the consent of every stockholder even though a general power may be inserted in the by-laws providing for their alteration.

The seventh corporate power is the power to wind up and dissolve. Under the laws of New Jersey the following methods are available for the dissolution of a corporation.

First: Limitation in the certificate of incorporation.

Second: Dissolution by the incorporators before the payment of capital.

Third: Voluntary dissolution by directors and stockholders or by unanimous consent of the stockholders.

Fourth: By an act of legislature.

Fifth: By decree of the court in insolvency proceedings, and for failure to obey the court's order to bring the books into the state.

Sixth: By proclamation of the governor for failure to pay taxes.

The fourth method of dissolution requires some comment. Section four of the Corporation Law of New Jersey is as follows: "The charter of every corporation or any supplement thereto or amendment thereof, shall be subject to alteration, suspension and repeal, in the discretion of the legislature, and the legislature may at pleasure dissolve any corporation." A similar provision is found in the corporation acts of every state of the Union. It is intended to assert the supreme control of the state over the corporations which are the creatures of the state. Before the passage of the general corporation law, it had been held by the Supreme Court of the United States in the Dartmouth College case that a corporation's charter is an irrevocable contract between the state and the corporation.

The right of suspension, alteration, or repeal of the charter of the corporation is exercised only in the public interest and it is subject to certain limitations, for example: The legislature can not so modify a charter to annul contracts made with third parties; neither can it so modify a charter as to take away property without compensation.

We see now the seven general powers which the corporation possesses. In addition to these powers, the corporation clothes itself in its charter by permission of law, with the powers necessary to carry out the special objects of its foundation, and if it does not enumerate all the powers necessary to achieve this object, the law allows it to exercise additional pow-

ers, "so far as the same are necessary or convenient to the attainment of the object set forth in such charter or certificate of incorporation." It is unusual, however, for a corporation to rely upon this power given to it by the corporation act to exercise additional or implied powers. Corporation attorneys have worked out formal statements of expressed powers of organization for all kinds of business. The claims of these powers are made in special object clauses which set forth in detail the different things which the corporation claims the right to do. Special object clauses are so drawn as to empower the corporation to carry on certain primary lines of business, also to do those things which may be necessary or convenient to further the main object of the corporation. For example, the Kankakee Packing Company is authorized by its charter,

"To buy and otherwise acquire, sell and otherwise dispose of, deal in and with and to slaughter hogs, cattle, sheep and other live stock;

To acquire by purchase or otherwise, preserve, pack, manufacture, cure, deal in and with all kinds of ham, sausages, meats, beef, pork, bacon, lard, fat, tallow, fertilizer and provisions, and all or any products of live stock of every nature and kind;

To carry on the business of cold storage and warehousing and all or any business necessary or impliedly incidental thereto;

To operate and maintain a packing house for preserving and packing meats and provisions of all kinds, and to produce, buy or otherwise acquire, sell or otherwise dispose of, deal in and with, the products of the same."

The foregoing are the express powers of the Kankakee Packing Company. In carrying out these express powers, it may be necessary for the company to engage in a variety of other lines of business and so the charter empowers it "To conduct a general trading, commission and storage business;" to buy and rent or otherwise acquire conveyances for the transportation, in cold storage or otherwise, of live stock,

and, as incidental to the cold-storage business to manufacture ice and cooling compounds. The charter also authorized the company to own, lease, operate and control all kinds of transportation undertakings both in New Jersey and other states, by direct ownership or the ownership of stock in these companies, and even beyond this the charter authorizes the company "to manufacture, produce, buy or otherwise acquire, sell or otherwise dispose of and generally deal in or with all kinds of goods, wares, merchandise and materials, raw as well as finished;" and further "to acquire the good will, business rights and property of any person, firm, association or corporation."

These sweeping provisions, however, are not intended to enlarge the power of the company beyond the limits of the packing business, but were granted in order that the corporation may achieve the greatest possible success. Under these powers, the packing company can do anything which contributes directly or indirectly to the packing business. Outside of this, however, it can not go, and if the directors of the company should use the company's funds for any enterprise not directly connected with the packing business, at the instance of a stockholder, they could be stopped.

We have already seen how flexible is the organization of the business corporation and we now understand how complete are the powers of this association to transact business as a natural person. We have also seen how vastly superior is the corporate form of organization to that offered by the partnership. It is no cause of surprise, therefore, to find that the business corporation is the accepted form of business organization. When men come together for the prosecution of any joint enterprise it is unusual for them to organize under the partnership form. Even in those states where laws provide for limited partnership, wherein the liability of the partner may be confined to the specific amount he invests in the business, or where, as a special partner, he takes no active part in the management of the business, the corporation form is the one which prevails.

The first step, therefore, in the flotation of a proposition

is the organization of a corporation to conduct the business. The corporation laws of the states differ in many respects and the first problem confronting the incorporators is the selection of a state whose corporation laws will enable them to accomplish the objects of their business in the methods which they prefer to use. The problem before the incorporators was thus stated by former Attorney-General Wickersham in a lecture delivered at Harvard University:

"In a large number, perhaps a majority of cases, the organizers of a corporation enterprise are free to select from among several, at least, of these states, the one in which to incorporate. No large business is confined to the limits of one state, although natural conditions may determine the place where mining, manufacturing or some strictly local business is to be carried on.

"What has been termed 'the legislative competition for capital' has led states like New Jersey, West Virginia, Maine and Delaware, which are not naturally great industrial and commercial commonwealths, to enact most liberal corporation laws, which have been availed of by a vast number of associations, which, in the ordinary and natural course of events would not have resorted to those states for a charter."

In Pennsylvania or Ohio a company can be organized for only one purpose, which must be stated in the certificate of incorporation. If several lines of business are to be carried on, even though these activities are directly related, it is difficult to accomplish this purpose in a state like Pennsylvania or Ohio without forming separate corporations. The amount of capital which must be paid in at the organization of the corporation also differs between the different states. The liability of stockholders is another consideration. In New Hampshire, for example, stockholders are made jointly and severally liable for all the corporate debts until the whole capital is paid in. They are individually liable for the wages of employees in a number of states. Some states also require that directors' meetings should be held and the books of the company kept within the state. The corporation laws

of some states, such as Pennsylvania, have provisions intended to secure representation by the board for the minority stockholders. It is customary, therefore, for the incorporators to select a state which gives them the greatest privileges, no matter if that state may be located three thousand miles away from the place in which they may do business.

In such a case, instead of doing business as a domestic corporation, they come into their state as a foreign corporation. The transaction of business in every state in the Union by a foreign corporation is now permitted by local laws. These foreign corporations must subject themselves to the same regulations as those passed for domestic corporations and in some cases special regulations; they must pay a license and furnish information to the state authorities for purposes of taxation. If they conform to these regulations, however, they are given the same freedom of action as that possessed by domestic corporations. In certain cases, it is true, even the most liberal states require certain kinds of business to be carried on by their own corporations. In New Jersey, for example, railroad, street and steam, gas and electric light, telephone and telegraph companies, banking institutions, and, in general, all corporations with the proper conduct of whose business, the general public, as distinct from a limited number of customers, is concerned, and all of whose operations should be under the direct control of the state authorities, must be incorporated under New Jersey laws. All other kinds of business, trading, manufacturing, mining, lumber and agricultural may be carried on in any state by corporations organized in any other state.

Having selected the state whose corporation law seems best adapted to their purposes, the incorporators proceed to work out in their charter and by-laws a financial plan, which, when carried out, will place at the disposal of the new company the money or property which it requires and which shall give suitable recognition, in the distribution of profits and the right to vote for directors and on other matters, to those who contribute this capital.

CHAPTER IV

MATERIALS OF THE FINANCIAL PLAN

A CORPORATION has been defined as an association of individuals authorized to own property, to contract debts, to appoint officers and agents and to manage its business within the limit of its formal grant of authority by the state known as its certificate of incorporation or charter; in all respects to act as a natural person. The association, it will be remarked, owns the property; the stockholders own the association. The stockholders are represented in the management of the business of the association by trustees known as directors. These directors, while transacting the most important business themselves, appoint administrative officers who carry on most of the work of the business management.

The ownership or property interest in this corporation is called the stock of the corporation, and this stock, for purposes of convenience in distributing, is divided into shares. It has long been the custom to represent this stock ownership in the corporation by a certain sum, such as $500,000 or $1,000,000 or in the case of the United States Steel Corporation, $1,100,000,000. This sum is presumed to be the amount of capital, i.e. property or money, which has been contributed to the corporation to equip it for the transaction of business. This capitalization, as the expression of ownership in the company, is divided into shares each of which, being a proportionate part of the total capitalization, represents an assumed sum of money. This assumed sum is known as the par value. If the capital stock of the company, for example, is $100,000 and is divided into 1,000

shares, then the assumed or par value of each share is $100. If the capitalization is divided into 1,000 shares the par value of each share is $10 and if, as sometimes happens, 1,000,000 shares, the par value is $.10. Since it is in this form the ownership of the corporation is usually expressed, the first step in the preparation of the financial plan is to fix upon a certain capital which shall represent the ownership in the company. The considerations affecting the amount of this capitalization will presently appear.

It is not necessary that shares of stock shall have any par value. The laws of both Wisconsin and New York authorize the issue of shares without par value. When the method of issuing shares without par value is used, instead of setting forth that the capital stock is $100,000 divided into 1,000 shares of $100 each, the representation is made that the capital stock is divided into 1,000 shares. The issue of shares with par value is of no benefit except as the prospective purchaser of such shares may identify the figures presented on the stock certificate with the value of the shares which this certificate represents. Experience has shown, however, that there is no necessary connection between these two facts. The value of the shares depends upon the earning power of the company issuing the shares and this earning power, while dependent to a large extent upon the amount of money or property contributed to the company, primarily depends upon the ability with which this property is administered by the directors and officers of the company. It is also largely influenced by the general business conditions of the country, and those affecting the particular industry in which the company operates. For all practical purposes of investment, a share of stock without par value serves as well as the more familiar type of share. The holder of such a share can receive dividends at the rate of a certain number of dollars per share, the percentage six or seven per cent, the form in which announcement of a dividend is usually made to the public, being merely a method of expressing the return on stock. The holders of such

shares can vote and participate in the proceeds of liquidation. All the rights of stockholders are theirs. If they desire to offer their stock for sale, their shares will be valued exactly as any other kind, on the basis of profits and dividends.

These shares of stock or ownership may be sold to provide funds for the company. In private corporations, such as manufacturing and trading companies and financial institutions, this is the usual method. The company is capitalized for the amount of money which is immediately required, and those who desire to partake in the enterprise purchase varying amounts of stock. The method is to circulate a subscription agreement, by which the subscribers bind themselves to purchase certain numbers of shares. This agreement can be enforced against delinquent subscribers by the usual processes of debt collection.

The rights of holders of these shares are as follows: First to vote for the directors of the company and on all propositions which the charter or laws of the state declare shall be submitted to a vote of the stockholders—for example, the sale of the property of the company, the issue of a special class of stock, the placing of a mortgage on the property of the company, or the dissolution of the corporation. In large public corporations, the stockholders are so widely scattered that it is usually not convenient for them to attend meetings of the corporation. Provision is, however, made in the law for them to vote even though absent. The political elector must go personally to the polls to deposit his ballot. The stockholder, however, by signing a written power of attorney, called a proxy, may authorize anyone designated in the power to cast the number of ballots to which the number of shares which he owns entitles him. The proxy need not be in any prescribed form. A telegram has been held to be sufficient proxy. It may convey to the attorney a general power to vote the number of shares in the proxy or it may designate the person or the measure for which the holder of the stock desired his vote to be cast. A proxy may be revoked at any time before the election and a new proxy issued to another

attorney or the stockholder himself may appear in person and cast his vote as he pleases.

The general rule is that the ownership of one share of stock entitles the holder to one vote, but this rule can be modified in any way that the incorporators may desire. They may provide, for example, that one share equals one vote up to 100 shares; from 100 to 200 shares, two shares equals one vote; and from 200 to 500 shares, three shares equals one vote, the purpose being to reduce the voting weight of large stockholders. Such provisions are to be found in the corporation laws of some states.

In the absence of special provisions to the contrary, in corporation elections just as in political elections, the majority rules and this majority, since it is a majority of stock and not of individual votes, may consist of one man. This stockholder may be arrayed against 100,000 other men who, because their collective stock holdings are one share less than half of the total number of shares, are powerless to influence the policies of the corporation by their vote at stockholders' meetings. It is to prevent such exercise of authority by a few stockholders over a large number of individuals holding a minority of shares that provisions as just indicated have been devised.

A more familiar restriction on the power of the holders of the majority stock, however, regulates their right to control the affairs of the corporation by undertaking to secure for the holders of the minority of stock a sufficient representation on the board of directors to enable them to know what is going on and thus to act promptly if their interests are endangered by any act of the majority directors. This method of protecting the rights of the minority is known as cumulative voting. It is thus described in section 35a of the Corporation Act of New Jersey.

"The certificate of incorporation, original or amended, of any corporation now or hereafter organized under the laws of this state and thereunder issuing or authorized to issue shares of its capital stock, may provide that at all

elections of directors, managers or trustees, each stockholder shall be entitled to as many votes as shall equal the number of his shares of stock multiplied by the number of directors, managers or trustees to be elected, and that he may cast all of such votes for a single director, manager or trustee or may distribute them among the number to be voted for, or any two or more of them as he may see fit, which right, when exercised, shall be termed cumulative voting."

Suppose, for example, that there are 100 shares of stock outstanding and five directors to be elected. The holder of twenty shares of stock may vote as follows when cumulative voting is provided: He may cast twenty shares of stock for directors A, B, C, D and E, or, in case he finds himself in the minority, and desires to secure the election of at least one director who will represent his interests and keep him posted, he may elect to cast 100 votes, which equals the number of shares he owns times the number of directors to be elected, for director E or he may cast 50 votes for E and 50 votes for C. When cumulative voting is provided, it is impossible for a stockholder owning one-fifth of the stock of a company having five directors, to be denied representation on the board. He is certain to provide a clear majority for his candidate.

Stockholders have the right to be faithfully represented by directors. Directors must not speculate with the funds or credit of the company; they must not, without the consent of the stockholder, express or implied, be parties to any contract with the corporation, and they must exercise good faith to the stockholders in all their dealings. Directors must answer to stockholders, not only for acts of commission, but for negligence in caring for the interests committed to their charge. Directors of American corporations usually serve without compensation other than a small fee for attending meetings. There is no legal prohibition against paying them stated or contingent salaries.

Stockholders have, finally, the right to participate in the profits of the company, when the directors decide that these

profits have been earned, and that it is expedient to distribute them; and to share in the proceeds of the assets of the company in case of dissolution or liquidation. These rights of the stockholder are set down in detail in the certificate of incorporation or charter. The incorporators themselves draw up this certificate under the general incorporation law of the State. When duly authenticated, recorded and filed with the proper official, it becomes the charter of the company, the evidence of its right to be a corporation, the fundamental contract between the State and the corporation, between the corporation and its stockholders, and between the stockholders themselves, a contract which cannot be changed without the unanimous consent of every stockholder.

In but few cases can a public business corporation be financed in such a simple manner. When the appeal is made to the public to supply funds, a more elaborate financial plan must be devised, dividing the stock into two classes, preferred stock and common stock, or as the English describe it, ordinary stock. Preferred stock has preference in the distribution of profits, and, if provided in the charter, preference in any distribution of the assets of the company to stockholders. If a company issues 50,000 shares, the owner of 5,000 shares is the proprietor of one-tenth of the corporation. In the absence of some special provision to the contrary, he can exercise one-tenth of the voting power. If the directors declare a dividend out of the profits of the company, this distribution is made to the stockholders on the basis of the number of shares held by each. For example, if the sum distributed is \$50,000, the holder of 5,000 shares would receive \$5,000. If the company is dissolved and its assets bring \$500,000, the holder of 5,000 shares would receive \$50,000. This would apply, no matter what the capitalization of the company might be, or into how many shares it might be divided. Whether the capitalization is \$5,000,000, or \$50,000, or the par value \$100, or \$1, the position of the stockholder in participation in dividends and in assets is the same.

This holds true if only one class of stock is issued. If preferred stock is issued, two classes of owners are created: First, preference shareholders, who receive a certain rate of dividends, usually seven per cent on the par value of their shares, which must be paid them out of the profits distributed before the holders of any of the common stock can receive anything; second, common stockholders, who take what is left after the claims of preferred stockholders have been satisfied. The advantages of the preferred stockholder is that he has a prior claim upon the profits of the company, a claim inferior, it is true, to that of the creditor, but which takes precedence of the common stockholder. If the profits of the company are only sufficient to pay seven per cent on the par value of the shares, if this amount is called for in his preferred stock contract with the corporation, and in case the directors decide to distribute these profits, the preferred stockholder will receive his seven per cent, while the common stockholder will receive nothing. It may also be provided in the contract between the corporation and the preferred stockholder that he shall participate equally with the common stockholder in any distribution of profits, until a certain additional amount of return on the preferred stock has been paid; or this participation with the common stock may begin after a certain dividend has been paid on the stock, after which both classes of stock share equally in profits; or the participation of the preferred stock may be unlimited from the beginning.

Preferred stock may be classified into cumulative and non-cumulative preferred stock. In the charters of companies issuing preferred stock, the following provision is usually found: "The dividends upon the preferred stock shall be cumulative so that if, in any year, the dividends amounting to seven per cent per annum, are not paid on the preferred stock, the deficiency is payable subsequently before any dividends are set apart or paid on the common stock." If the earnings of a corporation in a certain year are only sufficient for the distribution of $1,500,000, while the divi-

dend of seven per cent on the preferred stock calls for a distribution of $2,000,000 in the following year, the preferred stockholders, in addition to their regular dividends of $2,000,000, must receive the $500,000 of dividends which they failed to get in the preceding year before the common stock can receive any dividend. No matter to what sum these unpaid dividends on the preferred stock may amount, all these back dividends must be paid in some form to the preferred stockholder before the common stockholders receive anything.

Preferred stock may be divided into series, according to the order of preference, as first, second and third preferred. This arrangement is, however, uncommon. Preference may be given the preferred stockholder in assets as well as earnings by providing that, in the event of a dissolution of the company, and a sale of its assets, the par value of the preferred stock shall first be paid to its stockholders before anything is paid on the common stock.

The final form of security, utilized, as a rule, wherever possible in the preparation of a financial plan, is the bond. Corporation bonds are promissory notes, usually in denominations of $500 or $1,000, and as evidences of the same debt, $1,000,000, $50,000,000, or $300,000,000, as the case may be. The evidences of these large debts are issued in a number of notes, in order that they may be readily marketed. A corporation wishing to borrow $1,000,000 for thirty years on the best security, would have great difficulty in placing the entire loan with a single investor. No matter how good may be the security, few investors have sufficient funds to make a loan of this amount, and the few whose resources are sufficient are likely to have other uses for their money. By issuing, instead of one note for $1,000,000, one thousand notes of $1,000 each, the corporation is able to draw upon the funds of a large number of investors, who may buy its thirty-year notes, in lots of one, five or fifty.

These notes are usually secured as an entirety, by a mortgage, the relation of each to the security being the same as

every other. A mortgage is a written instrument for the conveyance of real or personal property by a debtor to the creditor or his representative to insure the performance by the debtor of his promise to pay interest and principal. But the possession of the property may remain with the debtor, and this is the rule when real property is pledged. When personal property, however, such as shares of stock is pledged as security for a loan, the actual property is usually turned over to the lender's representative or trustee, usually a trust company.

The form of a bond is as follows:

(Form of Coupon Bond.)

UNITED STATES OF AMERICA.

State of New York.

No. 100. $500.00.

THE LONG ISLAND RAILROAD COMPANY.

Four Per Cent Refunding Mortgage Gold Bond,
Due March 1, 1949.

THE LONG ISLAND RAILROAD COMPANY, a corporation organized and existing under and pursuant to the laws of the State of New York, for value received, hereby promises to pay to the bearer, or, if this bond be registered, then to the registered owner hereof, at its financial agency in the Borough of Manhattan, in the City and State of New York, 500 dollars in gold coin of the United States of America, of or equal to the present standard of weight and fineness, on the first day of March in the year nineteen hundred and forty-nine, and to pay interest thereon at the rate of four per cent per annum, from the first day of September, nineteen hundred and three, in like gold coin, semi-annually, on the first days of March and September in each year, upon presentation and surrender at its agency aforesaid of the coupons hereto annexed as they severally become due and until said principal sum is paid. Both the principal and interest of this bond are payable without deduction for any tax or taxes which the Railroad Company may be required to pay or re-

tain therefrom under any present or future law of the United States or of the State of New York.

This bond is one of a series of bonds of like date and tenor, of the denomination of five hundred dollars or multiples thereof, known as Four Per Cent Refunding Mortgage Gold Bonds, issued and to be issued to an amount not exceeding in the aggregate the principal sum of forty-five million dollars at any one time outstanding, all of which bonds are issued and to be issued under and equally secured by a mortgage and deed of trust dated September 1, 1903, executed by THE LONG ISLAND RAILROAD COMPANY to THE EQUITABLE TRUST COMPANY OF NEW YORK as Trustee, to which mortgage and deed of trust reference is made for a description of the properties and franchises mortgaged, the nature and extent of the security, the rights of the holders of bonds under the same, and the terms and conditions upon which the bonds are issued and secured.

IN WITNESS WHEREOF, The Long Island Railroad Company has caused its corporate seal to be hereunto affixed and attested by its Secretary or Assistant Secretary, and this bond to be signed in its corporate name by its President or Vice-President, and has also caused the signature of its Treasurer to be engraved upon the annexed coupons, as of the first day of September, in the year one thousand nine hundred and three.

THE LONG ISLAND RAILROAD COMPANY,
By President.

Attest:

Secretary.

(Form of Coupon.)

No. 100. $10.00.

THE LONG ISLAND RAILROAD COMPANY will pay to the bearer at its financial agency in the City of New York, on the first day of March, ten dollars ($10.00) in gold coin, being six months' interest then due on its Four Per Cent Refunding Mortgage Gold Bond Number 100.

Treasurer.

This bond or promissory note refers to a certain mortgage executed to the Equitable Trust Company of New York by the borrowing company, for the equal securing of all the bonds, ninety thousand in number, into which this loan is divided. This mortgage describes in detail the property of the company set aside for the securing of its bonds, and transfers it to the trustee, in the following granting clause:[1]

> That in order to secure the payment of the principal and interest of all said bonds at any time issued and outstanding under this indenture, according to their tenor, purport and effect, and to secure the performance and observance of all the covenants and conditions herein contained, and to declare the terms and conditions upon which said bonds are issued, received and held, and for and in consideration of the premises and of the acceptance or purchase of said bonds by the holders thereof, and of the sum of one hundred dollars, lawful money of the United States of America, to it fully paid by the Trustee on or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged. The Long Island Railroad Company, the party of the first part, has *granted, bargained, sold, aliened, released, conveyed, assigned, transferred* and set over, and by these presents does *grant, bargain, sell, alien, release, convey, assign, transfer* and set over unto the said Trustee and its successors in the trust hereby created, *all and singular the railroad and ferry property, and other property,* real and personal, used in connection with such railroad and ferry property, and franchises of every kind relating thereto or exercisable in connection therewith, of the Railroad Company, including the following, to wit:[2]

(A detailed description of the property follows.)

This grant, however, is not absolute, but conditional. If the borrowing company performs its obligations to pay principal and interest, and, as we shall show hereafter, to con-

[1] Detailed provisions for registration omitted.

[2] Italics are the author's.

serve the security of the bonds, then the grant lapses. It is made for a specific purpose, namely the securing of the bonds, and when the bonds have been paid, the purpose has been accomplished, and the title to the pledged property reverts to its owner who is, moreover, so long as he lives up to his obligations, allowed to remain in undisturbed possession. The clauses of the mortgage governing these matters are as follows: First, the "Habendum" clause:

> TO HAVE AND TO HOLD all and singular the above mentioned and described railroads, railroad property, ferries, ferry property, franchises, real estate and personal property unto the said The Equitable Trust Company of New York, as Trustee, its successors and assigns forever.
>
> BUT IN TRUST, NEVERTHELESS, for the equal and proportionate benefit and security of all holders of the bonds and coupons issued and to be issued under and secured by this indenture, and for the enforcement of the payment of said bonds and interest, when payable, according to the tenor, purpose and effect of such bonds and coupons, and to secure the performance and observance of and compliance with the covenants and conditions of this indenture, without preference, priority or distinction, as to lien or otherwise, of one bond over any other bond by or by reason of the purpose of its issue, so that each and every bond issued or to be issued hereunder shall have the same right, lien and privilege under and by virtue of this indenture, and so that the principal and interest of every such bond shall, subject to the terms hereof, be equally and proportionately secured hereby as if all had been duly issued, sold and negotiated simultaneously with the execution and delivery hereof.[1]

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[1] The right of the railway company to remain in possession of the property is not expressly stated in this mortgage but is implied from numerous clauses. This conveyance of its property by a company to the trustee is not in perpetuity. When the obligations of the bonds are discharged the property reverts to the company.

> ARTICLE SEVENTEENTH.—If, when the bonds hereby secured shall have become due and payable, the Railroad Company shall well and truly pay or cause to be paid the whole amount of the principal and interest due upon all of the bonds hereby secured then outstanding, or shall provide for such payment by depositing with the Trustee hereunder, for the payment of such bonds and interest thereon, the entire amount due or to become due for principal and interest, and shall also pay or cause to be paid all other sums payable hereunder by the Railroad Company and shall well and truly keep, perform and observe all the things herein required to be kept, performed and observed by it according to the true intent and meaning of this indenture, then and in that case the premises and all properties, rights and interests hereby conveyed shall revert to the Railroad Company and at its cost and expense, enter satisfaction and discharge of this indenture upon the records; otherwise, the same shall be, continue and remain in full force and virtue.

In addition to promising to pay the principal and interest, the railway company enters into a number of agreements which are designed to maintain the security of the bonds intact. Some of these covenants are as follows: to pay taxes, to keep the property in repair, and to perform all the obligations of the franchises and leases under which the lines of the system are operated. Failure to perform any of these covenants would evidently impair the value of the security underlying the bonds.

In case the railway company defaults in the payment of principal or interest, or fails to perform any of the covenants into which it has entered for the protection of the bondholder, the mortgage provides that the Trustee may either enter upon the property and operate it for the benefit of creditors, or sell the property and apply the proceeds of the sale to the payment of the company's debts, returning any balance which may remain to the company, or apply for a receiver to administer, and if deemed wise, sell the property

for the benefit of creditors. The company agrees not to interpose any obstacle or objection to the enforcement of the bondholders' rights by the Trustee.

The purpose and effect of this mortgage is to set apart certain property of the company for the protection of its creditors should it default on any of its obligations, and to provide a method by which the representatives of the creditors may take possession of this property when default occurs, and apply its income or the proceeds of its sale to the payment of the company's debts. The company, in effect, says to its creditors: "We appoint you or your representative, our trustee, to pay our debts in the event that we are unable to pay them. In order that you may discharge your trust, we place in your hands certain property with the stipulation that as long as we perform our obligations we may be allowed to use the property as our own. Should we fail, however, in the performance of any of these obligations, then you, our trustee, are to sell the property and so discharge the obligation of your trust."

These mortgages may be of various grades, first, second, and third mortgages, all resting upon the same property, differing from each other in the relative superiority of their liens. Thus the bonds secured by the lien of a second mortgage, if the company defaults on their interest, cannot enforce their claim by seizing and selling its property, until they have first satisfied the claim of the holders of the first mortgage bonds, or, if they sell the property, they must sell it subject to this first mortgage lien. Except during a receivership, as will be explained hereafter, as long as the bonds which the first mortgage secures are in existence, the property of the company can in no way be separated from the lien of the first mortgage. In the same way, the lien of the third mortgage is inferior to that of a second mortgage.

The nature of a mortgage as a conveyance of property appears more clearly in a collateral trust mortgage, where the security of the bonds consists of the stocks or bonds of other corporations. Under these mortgages, not merely the

title, but the physical possession of the property passes to the Trustee. For example, the Trust Indenture securing the bonds issued jointly in 1901 by the Great Northern and the Northern Pacific Railroad Companies, secured by the stock of the Chicago, Burlington & Quincy, provides:

> That, in order to secure the payment of the principal and interest of all such bonds at any time issued and outstanding under this indenture, and the performance of all the covenants and conditions herein contained, and in consideration of the premises and of the purchase and acceptance of such bonds by the holders hereof, and of the sum of one dollar to each of them duly paid by the Trustee at the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, the Railway Companies, parties of the first part, have assigned and transferred, and by these presents do assign and transfer unto the Trustee, party of the second part, its successors and assigns, one million and sixty-six thousand and six hundred (1,066,600) shares of the capital stock of the Chicago, Burlington & Quincy Railroad Company, the certificates for which have been delivered to the Trustee, and all additional shares of the capital stock of said Company in exchange for which bonds hereby secured shall be certified and delivered hereunder.
>
> TO HAVE AND TO HOLD the said shares of capital stock, and all additional property that hereafter shall become subject to this indenture unto the Trustee and its successors and assigns, in trust for the equal and proportionate security of all present and future holders of bonds and interest obligations issued, and to be issued, under and secured by this indenture, and for the enforcement of the payment of said bonds and interest obligations when payable, and the performance of and compliance with the covenants and conditions of this indenture, without preference, priority or distinction as to lien or otherwise of any one bond over any other bond by reason of priority in the issue or negotiation thereof.

If any default should occur on the part of the borrowing companies, the Trustee is authorized to sell the shares of stock securing the bonds, and to proceed against the Great Northern and the Northern Pacific for the recovery of any balance which may remain after the Trustee applies the proceeds of the sale to the payment of the bonds. As long, however, as the borrowing companies carry out the conditions and covenants of the mortgage, the Trustee empowers the company issuing the stock which he holds in pledge, the Chicago, Burlington & Quincy, to pay to the owners of the stock, the Great Northern and the Northern Pacific, the dividends on the stock, and issues to them his power of attorney, or proxy, which will authorize them to vote the stock as though the certificates representing it were in their possession, and they appeared as the registered owners of the stock on the books of the Chicago, Burlington & Quincy. In case of any default, however, the Trustee immediately resumes these delegated rights of ownership, and the two borrowers lose their right to vote the Burlington stock and to receive dividends.

CHAPTER V

THE ISSUING OF SECURITIES

We have now described the ordinary securities which our new company may issue to obtain the money required to construct its plant. Our next topic is the methods by which these securities are prepared and included in a plan of capitalization, for sale to bankers or to the public.

In taking up the considerations which the banker and promoter must have in mind in preparing a financial plan, we note first that their chief concern is to obtain the necessary money on the easiest terms. Up to the point of providing the money, their interests are united. It is only when the division of the profits is reached that they part company. We have now to consider the choice of securities of which the capitalization of the new company is to consist. These are, as we have seen, stock of various kinds, and bonds with various kinds of security.

As a rule, whenever the enterprise admits, the financial plan will call for the issue of bonds, and if that fails, for the issue of preferred stock. The reason for preferring this method of borrowing lies in the nature of a bond. The purchaser of a corporation bond, in return for what he considers to be sufficient security of income and principal, surrenders his right to participate in the profits of the company above the moderate rate of interest named in his bond, four, five or six per cent. With the preferred stockholder, the situation is the same. In return for a preferred claim to a fixed rate of dividend, the preferred stockholder, unless his stock is participating, surrenders the remainder of the dividends

to the common stock. If, therefore, in the financial plan, all, or a large part of the money necessary, can be secured by selling bonds, and if the expectations of the promoters that large profits will be earned are realized, it is more profitable to employ this method.

Suppose, for example, that $1,000,000 is required to carry through the consolidation, or build the plant, or construct the railroad, and that the earnings of the enterprise will be at the rate of twelve per cent or $120,000 annually. Suppose, further, that this money can be raised either by the sale of bonds, or by the sale of stock, or that both methods can be used in combination. If $1,000,000 can be provided by the sale of bonds bearing six per cent interest, the promoters and bankers will have common stock which can share earnings of $60,000 a year, after paying interest on the cost of the property, and for this stock they may have paid nothing, except the cost of securing the options and selling the securities. Their stock is all "velvet." Although they may have to surrender part of this common stock in connection with the sale of bonds, they can usually retain a sufficient amount to control the company. If, on the other hand, they are obliged to sell common stock to obtain this $1,000,000, they must admit each share of stock to participation in their earnings at a higher rate than that which bonds usually carry. Furthermore, when the security is good, bonds can be more readily sold, and at proportionately higher prices, than any kind of stock. For these reasons, from the standpoint of the banker and promoter, bonds are preferred whenever the nature of the business admits of their issue.

We now take up the classification of industries and enterprises into those which furnish satisfactory security for the issue of bonds and those which do not. In the discussion of the mortgage as security for a bond issue, we have seen what great attention is paid to the enumeration of the items of property of a corporation, how carefully this property is segregated to protect the holders of the bonds. When this property is nonspecialized, that is when it can be put to a

variety of uses, so that it can readily find a purchaser, for example, real estate, or stocks of finished goods, or materials, then the property itself furnishes the security for the loan. When, however, the property of the company is specialized to the use of a particular business, such as a railroad or manufacturing plant, where the business must be carried on in a certain place and by people who are skilled in its management, and where the property, once devoted to a particular use, can be turned to no other use, the real security of the creditor is not the property but the earnings of the property. With a mortgage on centrally located real estate, the selling value of the real estate can be easily realized, and a loan can be made without reference to the profitableness of the business which is to be carried on in the property. One million dollars, however, may be invested in the property of a manufacturing company which could not be sold for any other use than the one to which it is specifically devoted, for more than $100,000. The security of the creditors is here the profitableness of the business which is carried on in the factory.

Furthermore, a business is not an aggregate of physical property but consists of physical property—buildings, boilers, machine tools—plus an industrial opportunity, plus the organization and ability to operate the business. The corporation owning this business borrows the money, and the value of the business is based upon its earnings. The physical property, which is set aside with such a profusion of formality in the mortgage, is merely the visible symbol of its earning capacity. Without the plant, it is true, earnings would be impossible, but the plant has little value unless the spirit of profitable life is breathed into it by an intelligently managed organization. In estimating the stability of different classes of enterprises to furnish security for bond issues, we must take account first of this factor of earnings.

Since the bondholder is solely interested in the security of his principal, and regular payment of his interest, and since both security and interest depend upon the permanence

of income, other things being equal the companies with the most stable earnings or a market for their products at all times reasonably satisfactory furnish the best security for bonds. Stability of earnings depends upon (1) the possession of a monopoly; (2) good management; and (3) the character of the business.

Monopoly is exclusive or dominant control over a market. The more complete this control, the more valuable is the monopoly. The advantage of monopoly lies in the fact that the prices of services or commodities are controlled by the producer rather than by the consumer. In the long run, the returns in profits from monopoly are greater than when the consumer is able to play off one seller against another, and so secure concessions in prices. Monopolies are of various origins. The most familiar are (1) franchises, the right to use public property for private purposes, for example, the furnishing of light, water and transportation, (2) control of sources of raw material supply such, for example, as that which the United States Steel Corporation exercises over the Lake Superior ore deposits, (3) patents, which give the exclusive right to manufacture an article for seventeen years; and (4) high cost of duplicating plant, which secures the railroads in thickly settled territory, where land values are high, and where terminal sites are especially costly, against competition from the duplication of their facilities. Of these forms of monopoly, those conferred by franchises and by high costs of duplication are most valuable from the standpoint of bond security. Next comes possession of supplies of raw material, and last patent monopoly.

Stability of earnings also depends upon good management. This means not merely economical operation but cultivation of new business. Stability of earnings depends finally upon the breadth of the demand. In manufacturing industries, for example, those enterprises which produce raw materials and the necessities of life have a more stable demand than those which produce highly finished articles and luxuries.

We may classify enterprises according to the quality of

the security which they offer for an issue of bonds. Mining enterprises—coal, iron, copper, lead—furnish a basis for bond issues only when the extent of the resource is known. When a bed of coal or a deposit of ore has been surveyed and its contents estimated, it furnishes a basis for a bond issue up to a moderate percentage of its market value. Industrial enterprises are mortgaged, as a rule, only when possessed of mineral properties or real estate. The limit of bond issues in these cases is narrow, and it has a close relation to the selling value of the property. Public Service Corporations, operating under franchises liberal in terms, furnish excellent security for bond issues. The monopoly of street railway or gas companies, which may have the exclusive right to serve the consumer for a term of years at prices which leave a large margin over the cost of production, is so perfect that the bondholder runs little risk of lending to a high percentage of the cost of the property. Railroads furnish perhaps the best basis of bond issue because of the stability of the demand for the transportation service which is rendered to every industry, and because of the high cost of duplicating the railroad plant, which secures existing lines in the possession of valuable territories, and, within the limits imposed by law, enables them to fix their rates on freight and passenger traffic. Most of the bonds which are outstanding in the United States are based on railroad property.

We now take up the amount of bonds which can be issued. The amount of bonds should not be so great as to impose upon the corporation a burden of interest charges which is above, or even equal to, a conservative estimate of the earning power of the company under the worst conditions which it is likely to meet. If a corporation does not pay its interest, and is put into bankruptcy, its affairs are thrown into confusion. Even though it is relieved from bankruptcy without reorganization by an improvement in its business, serious damage will always be found to have resulted. In issuing bonds, therefore, conservative financiers keep in mind the

danger of bankruptcy to result from business depression or other unforeseen contingencies, and regulate the amount of debt to guard against any such untoward event.

The considerations which relate to the stability of different enterprises as security for bonds can also be employed to determine the percentage of income which can safely be represented by interest on bonds. A railroad company can safely assume interest payments which bear a much higher proportion to its income than a manufacturing company whose earnings fluctuate within much wider limits. In most cases, no more than twenty per cent of the gross earnings of a railroad company should be represented by interest charges. This standard is established in one of the most stable of industries. It furnishes a limit above which, speaking generally, no company should go in pledging its earnings for the payment of interest charges.

In fixing the amount of bonds to be issued, provision should be made for future issues of capital. Under normal conditions, every corporation, if well managed, will expand its operations and will largely increase its initial capital in handling the increased volume of business which the growth of the country and the energy of its management will bring to it. If the capital of the company was originally obtained by an issue of bonds, it will again resort to its credit to provide funds for the enlargement of its plant. The corporate mortgage, however, is an obstacle to the subsequent sale of the bonds. When a mortgage authorizes $5,000,000, this indebtedness cannot be increased without the consent of the bondholder, which is seldom obtained. The corporation is not likely to be in a position to offer inducements sufficient to persuade the bondholder to relax the obligation of his mortgage, and permit an increase in the amount of debt which it secures. Failing this provision, the natural method for the company to adopt in raising money for extensions will be to mortgage these extensions, either directly, or by organizing separate companies to issue their mortgage bonds. When the company is very strong in earnings, and

its first mortgage debt is small, it may also raise money by a second or general mortgage.

These methods, however, while available and desirable in some cases, are not so effective as a first mortgage on the entire property of the company in satisfying the demands of the investor that the bonds which he purchases should be properly secured. Take, for example, the case of a railroad building a line from Kansas City to Galveston. Upon this line is placed a first mortgage, securing an issue of bonds sufficient to pay the cost of construction. The railroad prospers, and, within a few years, the necessity arises for a large amount of branch line mileage. If the first mortgage does not contain the provision, which is usual in the older mortgages, that the lien of the indenture should include all property owned or thereafter acquired, it would be possible for the company to issue bonds secured by a first mortgage upon the branches and a second mortgage upon the main line. These bonds would be inferior to the bonds secured by the first mortgage upon the main line, because the branches are not indispensable to the main line, while the main line is indispensable to the branches. The holders of bonds secured by a first mortgage upon branch lines, in case of default and foreclosure proceedings, come into possession of property which depends upon other property for its value. On the other hand, foreclosure of a mortgage upon the main line would bring into the possession of the bondholders property which could stand upon its own feet, which would not depend wholly or mainly upon the branches for its traffic, and to whose earning power the possession of branches would not be essential.

The best security for bonds issued by such a corporation is the lien of a first mortgage upon the entire property of a company, a lien protecting not merely the bonds first issued, but all later issues, so that every bond may be secured by the lien upon the entire system. In case of default, holders of bonds secured by such a mortgage come into the possession of the property as a whole. Their owners need

not make concessions to the holders of securities protected by first mortgages on certain parts of the system. Recent financial plans, recognizing the value of the best security in securing a ready market and a high price for bonds, authorize amounts of first mortgage bonds which shall be sufficient to provide, not merely for the original construction of the property, but for all additions and improvements. An example of such an issue is furnished by the Chicago Bell Telephone Company which, in 1908, authorized an issue of $50,000,000 of first mortgage bonds of which $3,000,000 were to be issued immediately, and the remainder over a period of years as required.

At this point, however, we meet an objection. One of the chief advantages, from the standpoint of security, of a mortgage bond over any kind of stock, is the limitation of its issue. The buyer of a mortgage bond knows exactly what his security is in relation to the obligations outstanding against it. If $5,000,000 of first mortgage bonds are sold the investor knows that this amount can never be increased without his consent. If, however, he bought preferred or common stock, in the absence of special restrictions, there would be no limit to the increase in the number of shares. It is necessary, therefore, in providing for a large bond reserve in a financial plan, to satisfy the investor that the large amount of bonds held in reserve to be issued from time to time as the company's business expands, does not weaken the security of the bonds which he is asked to purchase.

The bondholder should have no objection to the unlimited issue of bonds secured by the same mortgage which protects his own holdings, provided that the additional proceeds of the additional issues could be invested to produce an income as great or greater than that earned by the initial investment. Indeed, from one point of view, the sale of additional bonds and their investment to yield to the business more than their interest, strengthens the position of all the bonds, especially if any large part of these excess profits are left in the business. The earnings over interest charges are the protection

of the bondholder's interest. The surplus of assets over bond liabilities may be considered as an insurance reserve against such an impairment of the assets of the business as might threaten the security of the bonds. If a company is well managed, and if its improvements and extensions are conservatively made, the bondholder should have no objection to an increase of the amount of the debt secured by the same mortgage which protects his own bonds. It is, however, difficult to give him such assurances, and to satisfy him that, without specific safeguards in the mortgage, his earnings will not be jeopardized by additional issues. A bond reserve is, therefore, usually included in the financial plan with such stipulations that the investor knows in advance the conditions under which the various installments of bonds authorized can be sold.

A company, arranging for a large bond reserve, must provide safeguards in the mortgage which will assure the investor that the proceeds of the issues of bonds which may follow those which he buys will be so invested as to strengthen his security. The first of these safeguards is a limitation on the amount of bonds to be issued in any one year. A company with $50,000,000 of bonds authorized, which proposes to issue $20,000,000 or $30,000,000 within a short time after the first issue of $5,000,000, might weaken the confidence of the investor in the security of his bonds. The investor could not be made to understand why such a large investment would be necessary. He is assured on this point by such a restriction on the amount to be annually issued as appears in the mortgage of the Bell Telephone Company already referred to, which provides that no bonds in addition to the $5,000,000 sold on that date, could be issued until after December 1, 1909, and, thereafter, the trustee is permitted to certify bonds not exceeding $5,000,000 per annum.

We have already seen that, if the same earnings are obtained on the investment of the proceeds of successive bond issues, as were shown on the first expenditure, the position of the bondholder would not be weakened. There is, how-

ever, always danger that this rate of earnings may not be realized. In order to insure the bondholder that there will always be a wide margin of safety in the cost of any property acquired with the proceeds of subsequent issues of bonds, provision is made, again quoting from the restrictions in the mortgage of the Chicago (Bell) Telephone Company, that the "total amount of bonds issued shall at no time exceed fifty per cent of the value of the property as represented by its total assets, nor more than sixty per cent of the real estate and construction account." This protects the bondholders against an overestimate by the directors of the earnings from the new property by providing an ample margin in the value of the property of the company above the mortgage obligations.

Such restrictions, however, are unusual. As a rule, the bondholder will be satisfied if a limitation is made similar to the following in the mortgage securing the bonds of the Pacific Telephone & Telegraph Company: "Of the first mortgage and collateral trust bonds authorized, $12,000,000 may be issued for extensions, additions, etc., but only up to 66⅔ per cent of the cost thereof." The Pacific Telephone & Telegraph Company is more liberal. The trust deed of this company provides that "of the remaining $25,000,000 bonds over the $3,000,000 first issued, $22,000,000 shall be issuable only to cover actual expenses on plant and improvements, but at no time shall the amount of bonds issued exceed an amount equal to eighty-five per cent of such expenditures, nor shall they be issued to provide for repairs."

Another form of restriction makes additional bond issues depend upon earnings. A common provision is that inserted in the mortgage of the Utica & Mohawk Valley Railroad Company where the bonds reserved "could be issued for seventy-five per cent of the actual cash cost of additions and improvements, but not until the net earnings for the preceding twelve months are equal to or exceed double the interest charge on the total amount of bonds outstanding, including those to be issued." It is better, from the standpoint of the

holder, to limit the issue of new bonds with reference to the amount of surplus earnings of the company than by any other standard, although the provision that bonds can be issued only up to a reasonable percentage of the cash cost of improvements is also desirable.

A common stipulation for the protection of the bondholder, whether bonds are reserved or not, with a company whose business is subject to wide fluctuations, provides that a certain surplus of quick assets over liabilities should be maintained at all times. A large amount of convertible assets in proportion to its liabilities insures a company against financial embarrassment. It was a lack of quick assets that carried down the Westinghouse Electric and Manufacturing Company in 1907. In the mortgage securing the $10,000,000 of five per cent gold bonds issued by the Republic Iron & Steel Company the following provision appears:

> The net cash and quick assets over and above liabilities, other than the $10,000,000 of bonds and the interest thereon, shall never be less than $6,500,000 while any of the said issue of bonds remains outstanding, until the total amount of such issue of $10,000,000 not canceled, shall be less than $6,500,000, and thereafter shall never be less than the amount of such $10,000,000 of bonds at any time uncanceled. By the phrase "cash and quick assets" is meant cash in bank, good accounts and bills and notes receivable, contract notes, or similar or other securities received on the sale of products of the Republic Company, raw material, manufactured products (it being understood that the material shall be figured at actual cost without interest if cost is below the market value thereof at the time of the valuation thereof hereunder, but at market value if at such time below cost thereof). It is expressly understood and agreed that in the term raw material no ore or coal shall be included except such as has actually been mined and is then on the surface at the mines available for shipment by rail or in transit or at upper or lower lake docks, or at works.

This requirement resulted, in 1907, in the suspension by the Republic Iron & Steel Company of dividends on its preferred stock, all the cash assets of the company being necessary to preserve the stipulated margin of quick assets above liabilities.

We may summarize the restrictions upon the issue of bonds reserved to be sold under first mortgage as follows:

(1) A limitation on the amount which can be sold in any one year;

(2) Each installment to be restricted to a certain percentage of the cost of additions or improvements upon which the proceeds of the bonds are expended, the percentage varying with the type of property and the permanence of the business.

(3) That the earnings of the company shall show a substantial margin over its interest or fixed charges, including the interest charges on the new bonds;

(4) In special cases, a provision that a surplus of quick assets shall always be maintained for the protection of the bondholder.

If these restrictions are included in the mortgage, the existence of a large bond reserve need cause no apprehension to the holders of bonds already issued under the same mortgage. The company, for its part, is enabled to raise money on the most favorable terms and each succeeding capital expenditure, on account of the margin required in the cost of the property, increases the security of the bonds already outstanding.

The Terms and Rates of Interest on Bonds.—A new company must usually sell its bonds at lower prices than after it has become established. After its success has been determined, the bonds of the company can be sold at higher prices or can be refunded at lower rates. Although, therefore, the investor usually prefers a long term bond of an established company, a new company usually issues a short term bond, not exceeding twenty or thirty years, expecting that when it matures, instead of selling on a five or

five and a half per cent basis, its bonds will sell to yield four or four and a half per cent. It then sells a new issue on more favorable terms and retires the bonds originally issued. In order to provide for refunding the bonds at lower rates of interest, should the opportunity offer, provision is frequently made in recent mortgages for retiring the entire issue at a premium often of five per cent, a premium low enough not to prove burdensome to a company wishing to pay off a six-per-cent loan by making another loan at five per cent, and yet a premium which amply compensates the holder of the six-per-cent bonds for any inconvenience he may suffer because he is forced to change his investment.

Our next question concerns the rate of interest to be fixed on the bonds. Corporations engaged in different enterprises pay different rates of interest, depending upon what investors in that particular class of bonds are accustomed to receive. The rate of interest also varies, to some extent, with the location of the enterprise. Certain conventional rates of interest may be indicated, varying with the class of enterprise in which the corporation is engaged. Railroad companies can usually borrow on first mortgage security at four to four and one half per cent. Public service corporations pay four and a half to five per cent; bonds of manufacturing, mining, lumber companies, etc., six per cent.[1] The explanation of these differences we find in the varying demand for different classes of bonds. The investor prefers railroad bonds since, as a class, these give him the best security. When corporations engaged in enterprises which, from the standpoint of stability and security are, in the mind of the investor, inferior to the railway industry, apply for funds, the demand for their bonds is weaker than the demand for railroad bonds, and a higher rate of interest must be paid.

A new enterprise must, as a rule, either sell its bonds at a discount or give a bonus in stock. Take, for example, an

[1] Many exceptions can be found to these percentages. They indicate, however, the approximate differences in interest rates on bonds issued by different classes of enterprises.

industrial corporation which has excellent prospects, and to which the creditor is willing to lend money. The company wishes to borrow at six per cent, and approaches a representative of the investor for a loan. The answer is that money can be loaned on security of this class to established companies with a record of earnings, interest payments, and dividends, and that if the new company wishes funds it must offer suitable inducements. These inducements can take various forms. A higher interest rate might be suggested, but this would create an unfavorable impression as to the security which the company offered.

Another method is to offer the bonds at a discount, which is equivalent to placing a higher rate of interest upon them. A six-per-cent bond, for example, which might be sold at par by an established company, might be offered by a new company at 80. This is equivalent to paying a higher rate of interest than six per cent. The corporation sells to the investor for $800 the right to receive six per cent on $1,000, and the further right, at the end of thirty years, to be repaid $1,000. In selling bonds at a discount a corporation is not merely paying six per cent for the money which it receives, but is also obligating itself to pay back a larger amount than it received. The sale of bonds at a discount is, therefore, less advantageous from the standpoint of the company than to offer the investor a higher rate of interest, although in practice it is more often resorted to.

It is unusual, however, to find corporations paying more than the conventional rates of interest. The sale of bonds at a discount is more common. The reason is that investors grow suspicious when unusual rates of interest are offered, while they will very gladly buy bonds at a discount which represent, on their face, a moderate rate to the corporation.

Another method, less frequently employed than before the days of careful regulation of capital issues, in selling the bonds of a new company, is to make the creditor, in a sense, a partner in the concern, by giving him with his bond one or more shares of stock, and selling him the bond at or near

par. In this way, the corporation receives a larger amount of money, and the creditor is admitted to share in the profits of the concern, a fact which may reconcile him to advancing money to new enterprises at no greater rates of interest than he could obtain from established corporations. The estimates of the earning power of the new company are usually so liberal as to permit a sufficiently large issue of stock to pay the bonus on bond sales, and still leave an ample supply in the hands of the projectors of the enterprise. As we shall see, however, in a later chapter, stock so issued does not often represent much value to the ultimate owner, to whom the purchaser of the bonds usually makes haste to sell his stock bonus.

CHAPTER VI

STATE SUPERVISION OF SECURITY ISSUES

Another form of protection, available for the investor against the excessive or improper issue of bonds by corporations, is furnished by the State. In some States, the amount of debt which can be incurred by a company is limited by statute. This is, however, unusual. The stockholders are dealing with their own property. The creditor is supposed to be able to look after his own interests. Arbitrary restrictions on indebtedness are, furthermore, objectionable in that they may interfere with the development of a company's business. A better safeguard to the stockholder and investor against unwise issue of securities is furnished by the Public Service Commission. These commissions are found in almost every State. In only a few of the larger States, however, have the commissions been clothed with sufficient powers to make their work really effective. In Massachusetts, New York, Maryland, Wisconsin, and Kansas the powers of the Public Service Commission are sweeping. The New York Commissions, for example, are given supreme control over all kinds of public service corporations, including railroads, street railroads, lighting and gas and telephone and telegraph companies. The supervisory and regulative powers of the commissions extend to character of service, to rates and fares, and to the approval of the issue of stocks, bonds and other forms of indebtedness. In this last power, the investor finds a considerable safeguard against the improper issue of securities.

The nature of this power over security issues is indicated by the following extract from Section 55 of the Act Creating the Public Service Commissions of New York:

> Any common carrier, railroad corporation or street railroad corporation organized under the laws of the State of New York, may issue stocks, bonds, notes or other evidences of indebtedness payable at periods of more than twelve months after the date thereof, when necessary for the acquisition of property, the construction, completion, extension or improvement of its facilities, or for the improvement or maintenance of its service or for the discharge or lawful refunding of its obligations, provided and not otherwise that there shall have been secured from the proper commission an order authorizing such issue, and the amount thereof and stating that, in the opinion of the commission, the use of the capital to be secured by the issue of such stock, bonds, notes, or other evidences of indebtedness is reasonably required for the said purpose of the corporation. For the purpose of enabling it to determine whether it should issue such an order, the commission shall make such inquiry or investigation, hold such hearings and examine such witnesses, books, papers, documents or contracts as it may deem of importance in enabling it to reach a determination.

Under this power, every corporation proposing to issue or authorize new securities must apply to the Public Service Commission for authority, and the authority will not be given until a thorough investigation has been made into the security back of the bonds and the purposes for which the money is to be spent.

The primary purpose of giving the commissions power over issues of securities was to protect the public against excessive issues of capital by public service corporations on the ground that an excessive capitalization might be used to defend rates or prices which were excessive. In the exercise of this power, however, the commissions have gone much far-

ther and have undertaken the task of protecting the investor against unwise capital expenditures. The Commission of the Second District of New York has outlined its method of procedure in cases involving the authorization of bond issues as follows: [1]

"In passing upon the application for leave to issue additional capital stock, the Commission will consider:

"Whether there is reasonable prospect of fair return upon the investment proposed, to the end that securities having apparent worth but actually little or no value may not be issued with our sanction.

"We think that to a reasonable extent the interests of the investing public should be considered by us in passing upon these applications.

"The Commission should satisfy itself that, in a general way, the venture will be likely to prove commercially feasible, but it should not undertake to reach and announce a definite conclusion that the new construction or improvement actually constitutes a safe or attractive basis for investment. Commercial enterprises depend for their success upon so many conditions which cannot be foreseen or reckoned with in advance, that the duty of the Commission is discharged as to applications of this character when it has satisfied itself that the contemplated purpose is a fair business proposition."

In practice, however, the commission has made such careful investigation as to warrant the inference which has been generally drawn by the investing public that for them to authorize a bond issue is equal to their guarantee that the issue is good. In the case of the Rochester, Corning, and Elmira Traction Company decided March 31, 1908, the commission outlined in detail the methods of investigation which it proposed to follow in determining the amount of bonds which could be safely issued by a newly organized enterprise as follows:

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[1] "Second Annual Report of the Public Service Commission," p. 12.

> An estimate will be made from a consideration of the results of operation of existing roads of the probable gross earnings.
>
> An estimate will be made in like manner of the probable operating expenses, taxes, and depreciation charges.
>
> The excess of earnings over the disbursements which must be made before fixed charges can be met represents the sum which is applicable to fixed charges.
>
> The maximum bond issue which will be allowed must be determined by the sum thus ascertained to be applicable to the payment of the interest charge.
>
> No bond issue should be permitted creating an interest charge beyond an amount which it is reasonably certain can be met from the net earnings.
>
> Stock representing a cash investment should be required to an amount sufficient to afford a moral guarantee that in the judgment of those investing the enterprise is likely to prove commercially successful.
>
> The order authorizing such stock and bond issues will contain approximate provisions designed to secure the construction of the road in accordance with the plans and specifications upon which the authorization was made and not in excess of the actual requirements.
>
> If the allowance proves inadequate for the required purposes, an application for further capitalization may be made, upon which application the expenditure of the proceeds of stock and bonds already authorized must be shown in detail.

After an issue of bonds has passed this searching scrutiny, the investor need have little fear concerning the safety of his bonds, whether a bond reserve many times the amount of the initial issue has been created or not. Indeed, in one notable instance, the first mortgage bonds of the Chicago Railways Company, which are issued under restrictions similar to those which have been outlined, such confidence has been placed in the efficacy of the precautions taken to guard against overissue, that bonds may be issued without limit under a so-called "open-end mortgage," every bond, no mat-

ter to what amount these may be issued, being equally secured as every other bond, by a first lien upon the property of the company. There is no essential difference between a large bond reserve and an open-end mortgage. The open-end mortgage, however, on account of the uncertainty as to the amount of bonds which may, at some time in the future, be issued, is inferior, in the opinion of most investors, to a large bond reserve. It is, moreover, in practice, no more effective in providing for the future capital needs of the corporation.

When a Public Service Commission has authorized the issue of securities, it is by implication bound to protect the company whose application it has authorized, not merely against the ill-advised action of their directors in using the credit of the company for improper purposes, but also against competing enterprises for which there is no public necessity and which would not, therefore, prove profitable. The New York Public Service Commission for the Second District, for example, in 1908, refused the application of the Buffalo, Rochester & Eastern Railroad Company for authority to issue securities for the construction of a line of railroad from Buffalo to Albany, paralleling the line of the New York Central, on the ground that the new enterprise would not prove profitable, and that the New York Central would be injured without any public benefit resulting. The new line proposed to interchange traffic at Albany with lines traversing New England, but the commission pointed out that the New England lines were not able to handle the traffic already delivered to them at Albany. This was sufficient reason for refusing to authorize the construction of another line which would make the congestion at the Hudson River even more acute.

At the time the New York Public Service Commissions were instituted, serious apprehensions were expressed by financial interests lest the new laws, because they took away from the directors or stockholders of corporations so much of the control which they had previously exercised over the

issues of new capital, would seriously interfere with the efforts of companies to provide funds for development. Indeed, the passage of the New York law produced a feeling of consternation among bankers and investors. As the commissions have progressed with their work, however, they have been forced into the position of virtually guaranteeing every security whose issue they approve. So well organized and so favorably regarded are the Public Service Commissions by the investor, as a result of the interpretation which they have placed upon their powers, that the bond salesman offering a security whose issue they have approved has his work of persuasion largely accomplished. In one case the issue of bonds by a Massachusetts company secured by the stocks of two other companies, and with its own stock owned by a fourth, presenting a situation almost incomprehensible, were readily sold, in the main for no other reason than that they were issued under the authority of the Massachusetts Commission. Bond dealers and large investors, with few exceptions, cordially indorse the control of security issues by public service commissions, because of the assurance which this control gives to the investor that his interest will be safeguarded.

CHAPTER VII

PROVISION FOR THE REPAYMENT OF BONDS

THE corporation bond is a promissory note. It differs from a bank loan only in the fact that it matures in twenty, fifty, or one hundred years, instead of in three months. When a promissory note matures, it must be paid, either in money or by a new note. With short-time obligations, such as are given in exchange for bank loans, payment of a substantial part if not all the debt is expected. With corporation bonds, however, the custom is to continue the debt indefinitely, exchanging new bonds for maturing bonds, keeping the security intact, and if possible improving it. If any holder of a bond at its maturity wishes cash for his obligation, the money is obtained by selling new bonds to other investors.

The reasons for this practice of refunding instead of paying corporate debts, lie in the relation of the bondholder to the corporation. Bonds are sold to investors who wish to secure a return on their money, with the guarantee that the principal sum will also be secured. These investments are regarded as permanent. The investor does not often desire the return of his money. He wishes the continuance of interest payments. If the principal of his bond is paid at maturity, he is obliged to look about for some other equally satisfactory investment, and this, at the time, it may be hard to find. The investor may wish to convert his bonds into cash at any time. As long as the interest is paid and the security is maintained, he can easily find a market for

his bond, usually at a price equal to or greater than the price he paid, with some other investor who is looking for a secured income. So, when its bonds mature, it is not difficult for the corporation to offer a new issue to take the place of maturing bonds, and secured by a first lien upon the same property. Those of the old holders who desire to continue the investment may take the new bonds, while the means of redeeming those bonds whose holders want their money can be obtained by selling the equivalent in the new bonds to new investors. While the conditions of security are met, the bondholder is indifferent to the repayment of his principal. At maturity, or before maturity if he desires, he can obtain his money. The bond investor is one who contributes capital to a company in return for a fixed and secured amount of its earnings. All that he asks of the corporation is that this income and the security of his principal shall not be jeopardized.

The repayment of bonds at maturity is also opposed to the interest of the corporation. The method by which provision for repayment can be made is to accumulate a fund against the date of maturity of the bonds. This fund must be in cash or securities. In either form the return to the corporation which has deposited money in the bank, or has purchased bonds to make provision for the repayment of its debt, is less than the company could earn on the same amount by investing it in its business. The argument against accumulating a fund for the repayment of debt is similar to the argument for incurring the debt in the first place. If a company can make ten per cent on its investment it can safely sell bonds bearing five per cent interest. If, therefore, it is wise to incur an obligation to pay $1,000 in interest on a twenty-year bond, and also to agree to repay the principal at maturity in return for $1,000 in cash paid to the corporation, because ten per cent can be earned on the $1,000, it is wise to invest $50 per year in the business of the company on which a return of ten per cent can be made, rather than to put this $50 in the bank or in securities yielding not more than five

per cent, in order to accumulate $1,000 to take up the twenty-year bonds at maturity. If the corporation has money which it can set aside for the purpose of redeeming its debt, it should let the debt run and invest this money in extending its business. By taking the second course, it increases the value of its property and the security of its bonds, and when its bonds mature, it will have small difficulty in issuing a new set of bonds, either to exchange for the maturing bonds, or to sell for the amount necessary to redeem them.

While the building up of sinking funds is usually unwise, there are exceptions to the rule. The first class of companies which should maintain sinking funds are those whose bonds are secured by a mortgage on property which is exhausted by the operations of the business. A railroad property may be expected to last forever. It is true that repairs and replacements are always going on, paid for out of earnings, and charged to operating expenses or depreciation. The property is, however, preserved by these outlays. At the end of the term of the bonds, their security is generally much larger, as a result of the expenditures upon its replacement and repair. When, however, bonds are secured by a mortgage on seams of coal or on standing timber, or on land which is to be broken up into small tracts and sold, the security of the bonds is exhausted by the operations of the business. Every ton of coal mined and sold, every thousand feet of timber cut down and sent to market, lessens by just so much the security of the bonds which have been issued on this property. When bonds are issued by companies operating in such industries, special provision must be made out of earnings for paying the bonds, either by installments or when they mature. The company must preserve the relation between its debt and the security for that debt, either by reducing the amount of the debt, as the value of the security falls, or by replacing the coal or lumber sold, by other property purchased out of its income.

The nature of sinking funds against bonds secured by

so-called "wasting" assets is seen in the following statement of the safeguards of bonds offered by a lumber company:

> The mortgage requires the deposit with the trustee of $5 per 1,000 feet, mill run, on all timber cut. It also requires the company to cut and manufacture exclusively from 15,920 acres containing 146,000,000 feet of timber, holding the remaining 38,000 acres, containing 232,000,000 feet, as a reserve, which cannot be cut during the life of this mortgage. This sinking fund should retire over $500,000 of this loan before maturity; the unpaid balance $300,000 will then have for security the remaining 38,000 acres.

Similar plans of keeping up the sinking fund are usually followed by all companies of this character. A coal mining company will set aside three or five cents for each ton mined to make good the loss in its coal. A land company will make certain payments for each acre sold, into the hands of a trustee.

Sinking funds are also needful when bonds are issued by companies whose business is not plainly of an enduring character. Railroad bonds usually carry no sinking funds. The bonds secured by companies operating interurban electric lines although shorter in term than steam railroad bonds, offer this safeguard in addition to the mortgage. Certain classes of power companies, real estate companies, and manufacturing companies can usually offer to the investor no positive assurance that thirty years from the time he buys their bonds the original value of his property will be intact, and their business will be prosperous. Such companies, in order to sell their bonds, must provide for payments to a trustee from their annual earnings of an amount sufficient to pay all or the greater part of their mortgage debts at maturity.

Sinking funds are divided into two classes: first, where the company makes annual payments to a trustee; and the second where the company issues its bonds under the serial plan so that a certain part of the principal matures each year until the entire amount is repaid within the term named

in the mortgage. When the first plan is adopted the question arises, What shall the trustee do with the money which is paid to him? Several methods of disposing of these funds are available. The mortgage securing the bonds of the Cudahy Packing Company provides that an annual cash sinking fund of $200,000, beginning November 1, 1910, shall be paid to the trustee, and shall be applied to the purchase and cancellation of these bonds at a price not exceeding 102½ and accrued interest; or, if not so purchasable, by drawing by lot at that price. The mortgage securing the first mortgage bonds of the National Enameling and Stamping Company provides that the bonds will be redeemable at 105 by annual drawings by the trustee over a period of twenty years by means of an annual sinking fund of $100,000, to which will be added the interest to be paid from time to time on the redeemed bonds. We have here the two methods usually employed in the expenditure of the money paid into the sinking fund to reduce a company's debt: (1) A trustee can by previous arrangement select at intervals, usually by lot, a certain number of bonds and call these in at a fixed price, paying, for example, $1,050 for a $1,000 bond; (2) he can purchase bonds in the open market.

The method of drawing bonds by lot for retirement at a fixed price is objectionable to the investor because he must be on the lookout for the announcement of the drawing of bonds for retirement, and frequently be put to the trouble of finding another investment for the money which the corporation may at any time return to him. These drawings of bonds, however, are often for payment at a good premium over the price paid, and this premium offsets any trouble to which the investor may be put because a part of his bonds are paid to him before maturity.

The plan of purchasing bonds in the open market is, from the investor's standpoint, better than the method of drawing bonds. The bond market is less active than the stock market. Bonds are usually bought for permanent investment. They

come on the market but seldom as compared with stocks, and in smaller amounts. The taking of this small floating supply, by the purchases of the sinking fund trustee, operates to maintain a market price higher than could be had without such a regular demand. From the standpoint of the corporation, however, aside from the fact that the buyers of these bonds are apt to be well satisfied with their investment, and open to new offerings of the same kind, if the company must retire a certain par value of the bonds in each year by purchasing at the market price, it may sometimes suffer a loss, because of the artificially high price resulting from the trustee's purchases.

This objection is met in the later mortgages by provisions similar to those given above, whereby the trustee is obliged to spend $200,000 or $300,000 each year in the purchase of bonds in the open market if these can be had at or below a certain price—say 105 or 106. If enough bonds are not forthcoming at this price, then the trustee may draw a sufficient number of bonds at the price stated in the mortgage to expend the money in the sinking fund. This provision tends to keep down the market price to the figure at which the bonds can be drawn.

A second alternative might be offered to the trustee in case he was not able to buy bonds at the price named in the mortgage. He might be allowed to buy other securities with the sinking fund. Some of the Burlington sinking fund mortgages contain this provision. This method, however, brings into the sinking fund an element of chance. The bonds bought for the sinking fund may rise in price, in which case the security of the bondholders will improve, or their price may fall, and the objects of the sinking fund, to the amount of the fall, will not be achieved. If bonds are bought at par for the sinking fund, to offset a debt when it comes due, and if in the meantime the price of the bonds falls to 90, the sinking fund lacks ten per cent of the sum needed to pay the bonds. It is better, if any bonds are to be bought for the sinking fund, that they should be the

bonds of the company which is building up the fund, so that the reduction of its debt may be certain.

A better method of using money in the sinking fund has been provided in recent mortgages. This is to invest the fund, either by absolute arrangement, or in case the trustee fails to buy bonds at a reasonable price, in improvements and additions. An example of this method is furnished by the following extract from the trust indenture securing the first mortgage bonds of the San Diego Consolidated Gas and Electric Company:

> Article Three. Section 1. The company covenants and agrees that it will deposit with the Harris Trust and Savings Bank, Trustee, in a Depreciation and Renewal Fund the following amounts annually: On the first day of June in each of the years 1910 to 1914, inclusive, a sum equal to three per cent (3%), and on the first day of June in each of the years 1915 to 1938, inclusive, a sum equal to five per cent (5%) of the amount, in par value, of bonds outstanding hereunder on the first day of October next preceding each such respective deposit.
>
> Section 2. The Depreciation and Renewal Fund shall be held by the Harris Trust and Savings Bank, Trustee, as a special trust fund, and the company shall be entitled to withdraw therefrom, upon certificates satisfactory to said Trustee, the aggregate amount of the actual and reasonable cash expenditures made by the company subsequent to April 1, 1909, for renewals and replacements of its plant, properties, and equipment now owned or hereafter acquired, exclusive of customary expenditures for current repairs and current maintenance ordinarily chargeable to operating expenses.
>
> Section 3. At the option of the company any part of said Depreciation and Renewal Fund may be withdrawn, upon certificates to the Harris Trust and Savings Bank, Trustee, to reimburse the company (a) for its actual and reasonable cash expenditures for permanent extensions and additions of and to its plants, properties, and equipment . . . provided such expenditures shall not have been previously made

> the basis for the issuance of bonds hereby secured; or (b) for its expenditures made in the purchase or redemption of bonds hereby secured at a price not exceeding par, accrued interest, and a premium of five per cent upon the principal thereof.

Here is a sinking fund provision, under another name, which gives the company the option of either buying its bonds at 105 and accrued interest, or of spending a certain amount upon its plant. When the business of the borrowing company is secure, as in this case, and if the trustee is vigilant in supervising the expenditure of the sinking fund, the security of the bonds can be conserved by the investment of the sinking fund on the improvement of the property. The value of the security will be increased at a more rapid rate under this method than the rate at which the liabilities of the company will be decreased by its purchases of its own bonds. This method does not apply to companies with wasting assets or to those whose future is uncertain.

The methods of disposing of bonds bought by the trustee for the sinking fund are as follows: (1) they may be canceled as purchased and delivered by the trustee to the company—the usual plan; (2) they may be kept in the sinking fund as an obligation of the company, and the interest paid into the sinking fund as an addition to the regular sinking fund appropriations—the retirement of the bonds proceeding at an increasing rate because of the addition of the interest on the bonds in the sinking fund to the appropriations from income for the benefit of the fund; and (3) the bonds held in the sinking fund may be sold for the benefit of the company.

The use of the third method is shown by the trust indenture of the San Diego Consolidated Gas and Electric Company, already referred to, which states that "said trustee upon the written request of the company shall hold uncanceled in said Depreciation and Renewal Fund any bonds so purchased, and the company may with the approval of said trustee sell any or all such bonds so held, in which case

the proceeds from the sale thereof shall be held and applied according to the provisions of this Article." This method of disposing of bonds in the sinking fund is available only for companies whose assets and business are permanent.

A method of managing sinking funds which is as yet little used is that of the serial bond. This plan has been followed by several leading bond houses who have sold large amounts of serial bonds, largely because they have been able, by employing the method of issuing bonds maturing in series, to sell high interest bonds of mining, lumber, and manufacturing companies, where the security, without the protection of serial payment, would be too small. Friends of the serial bond plan claim that "a safe margin of security on a bond issue at the time of its sale is by no means a guaranty that the same margin will exist during the life of the bond. Physical depreciation, changes in industrial conditions, changes in tariff, and transportation rates—any one of a large number of causes may impair the security, and the chances of business may impair the security of the bonds. The serial plan protects the investor against these accidents. Under this plan, a portion of the principal is paid off each year and no portion of the security released. The payments are graded according to the net earnings of the property, but are considerably larger than ordinary sinking fund payments. At each anniversary, upon payment of this installment of principal, the margin of security automatically rises." It is also claimed that the borrowing company, by the operation of the plan, is encouraged to keep the income from the property in the business in order to meet the annual installments. "He also finds it to his own advantage to maintain his property at a high standard. As his own capital invested in the property increases, there is an unconscious influence which tends toward promptness in meeting interest payments, taxes, and other charges." [1]

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[1] It is fair to Peabody, Houghteling & Co., from one of whose circulars this quotation is taken, to state that in offering so-called low-grade bonds, bearing high rates of interest, they not only insist upon

The serial bond plan has this advantage from the standpoint of the bond house, that it is able to sell the bonds maturing at an early date on much the same terms as commercial paper is sold, or short term notes of corporations, to financial institutions with surplus funds for short time investment. It is possible, in this way, it is claimed, to obtain a much broader market and readier sale for serial bonds than for long maturities. The objection to the serial bond plan from the company's standpoint is that its entire surplus income is likely to be absorbed in paying off its debt and the stockholder will receive nothing. It is evidently an exaggerated sinking fund which aims to absorb most of the available revenue of the property in the extinction of its debt.

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the serial plan of issue but also require that the owners should have invested a substantial amount in the property, seldom undertaking to purchase a sufficient amount of bonds to provide for the entire construction of the property.

Supplementary Note on Sinking Funds.—Recognition of the disadvantages of imposing additional fixed charges upon a corporation through the institution of large sinking funds, has resulted in certain modifications of this device. Sinking funds are frequently arranged on a graduated scale, to begin, for example, three years after the date of issuing the bonds, at the rate of one half per cent, this rate to be increased one half per cent each year until the full rate is attained. Sinking funds are also placed ahead of preferred stock dividends as a charge optional with the directors. In this case it is customary to make the sinking fund cumulative so that all arrearages of the appropriations to the fund must be discharged before any dividends are paid on the stock. The sinking fund of the reorganized Booth Fisheries Company contains this provision.

CHAPTER VIII

THE ISSUE OF STOCK

Whenever possible, for reasons which we have already given, the promoters of a new corporation will include a bond issue in their plan of capitalization in order to secure for themselves or their successors a larger dividend per share than could be received if stock were used to obtain the necessary funds. Certain kinds of industries, however, do not furnish a satisfactory basis for a bond issue, at least until their success has been well established, and then only to a moderate proportion of the value of their assets. The bonds of the class of companies known as industrials including manufacturing, mining, and trading companies and also, under some classifications, companies engaged in the sale of gas and electric power, are seriously restricted at the outset in their issue of bonds as a means of obtaining funds. The bond buyer surrenders all chance of participation in the increased earnings of a company in exchange for the guarantee of a fixed rate of return upon his investment. If this guarantee is doubtful, the security of the investment is discounted in the price of the bonds, if indeed these can be sold at any price. The bonds of industrial corporations, especially manufacturing companies, are unpopular with investors for reasons which have already been indicated in some detail. Companies operating in these industries can issue bonds to a limited amount, and under special safeguards, only after their business has been well established. At the outset, however, this form of security is not usually available to them.

The use of bonds in the plan of capitalizing a new company to be formed by the consolidation of previously existing corporations, is especially unpopular. The owners of these constituent companies are not likely to consent to have the properties which they turn in to the new company subjected to the lien of a mortgage to secure bonds to be sold to the general investor. They will insist that most of these bonds shall be directly issued in exchange for their property, leaving only a small amount to be sold. Furthermore, the issuing of bonds materially lessens the value of the stocks of the new company, out of which promoters and bankers are to get their profits. Especially do stock values suffer if bonds are issued to a substantial proportion of the value of the plants of the constituent companies. In the formation of the industrial combinations, bonds were very little employed. The chief exception was the United States Steel Corporation, where Mr. Andrew Carnegie was in a position to exact hard terms from the promoters, and received for himself and associates $300,000,000 of first mortgage bonds. In most cases the promoters of these enterprises went to considerable trouble to pay off all the debts, both funded and unsecured, for which the various constituent companies were responsible, because they considered it of the utmost importance, in view of the necessity of appealing to the public to buy the stocks of these companies, that the dividends on these stocks should not be jeopardized by the claims of bondholders.

When bonds cannot be issued, either because the industry does not furnish adequate security for a bond issue, or because of the necessity of presenting an attractive stock proposition to the investor, the promoter, in formulating his financial plan, falls back upon the issue of preferred stock. Most of the preferred stocks dealt in on the public exchanges, and now outstanding as original issues, were put out by the industrial combinations. There are numerous issues of preferred stocks by railroads but most of these were put out in connection with reorganizations, in exchange for bonds

whose interest could not, at the time, be earned. Preferred stock has been little used as original issues by promoters of railroad companies. Preferred stock has been quite largely used by public service corporations, but most of these issues are not dealt in on the exchanges. We shall find the methods employed in the original issue of preferred stock best illustrated in the practice of the trusts.

The *Railway and Industrial Supplement* published quarterly by the *Commercial and Financial Chronicle* gives a total of 101 important issues of preferred stocks by industrial companies, most of them consolidations. Most of this stock was given in exchange for the stocks or property of enterprises which entered the consolidations. In nearly every case preferred stock was also sold for cash to equip the new company with working capital, or to provide funds for the payment of owners or stockholders who would not accept stock in the new company. An examination of the list of preferred stock issues shows certain salient facts which may be taken as typical of this kind of security.

In most cases preferred stock is made cumulative as to dividends. Cumulative preferred stock gives to its holders a claim on earnings which is, in some respects, similar to that conferred by the possession of mortgage bonds. All unpaid dividends on such stocks must be paid before the common stock can receive any share of profits. Just as unpaid interest accumulates to the disadvantage of junior securities, so the preferred stockholder can assert his prior claim to profits, as against the common stockholder, up to the amount represented by the rate of dividends on the number of shares which he holds, times the number of years the stock has been in existence. If the profits are only sufficient to pay seven per cent on the par value of the preferred stock, if that is the rate named in the contract between the stockholder and the corporation, and in case the directors decide to distribute these profits, the holder of cumulative preferred stock will receive seven per cent, while the common stockholder will receive nothing.

Unless the cumulative feature is inserted, however, the advantage of the preferred stockholder over the common stockholder is more apparent than real. If preferred stock is noncumulative, the finances of the company may be so administered as to place the preferred and the common stockholder on a footing of exact equality. The corporation always needs money for improvements and extensions, and the directors may find a variety of excellent reasons for refusing to pay dividends on the preferred stock until the company is strong enough to begin paying both preferred and common stock dividends at the same time. Any money which may be reserved for the preferred stockholder and invested in the business will accrue, in part at least, to the benefit of the common stockholder, and the temptation is strong under these circumstances to sacrifice the preferred stockholder. If, however, the preferred stock is made cumulative, and if the earnings permit, the preferred dividends must be paid. They would otherwise accumulate against the common stock whose value might be entirely extinguished because of the hopelessness that the company would ever be able to discharge the arrears of accumulated preferred dividends.

The existence of the cumulative feature in the preferred stocks of the industrial combinations explains the persistence with which their directors have adhered to a liberal dividend policy, even in the face of depression when prudent management would seem to demand that the resources of the company be conserved. Even with weak companies of this class, plainly in need of capital for improvements, the practice of paying preferred dividends has been almost universal. The directors might, to the great physical benefit of the corporations themselves, have allowed these preferred claims to accumulate to any extent. They might have invested the money in improvements, piling up a large surplus over their liabilities. Such a policy, if continued for a number of years, would have placed the preferred stocks of everyone of these companies in a position where their dividends could be paid

without question, no matter what the condition of trade. The payment of dividends upon the common stock, under such a policy would, however, have been placed permanently out of the question. In five years, with seven per cent cumulative preferred ahead of it on which no dividends were paid, the common stock would have been buried under thirty-five per cent of unpaid preferred dividends. These back dividends, in most cases, even under the most favorable circumstances, with the liberal capitalization of the industrials, could not be paid off while, at the same time, the regular dividend on the preferred was being maintained, in less than five years more. A policy of investing profits in improvements at the expense of the cumulative preferred stockholder, means that the common stockholder must, in the usual run of events, be kept out of any dividends for a long time, perhaps until the par value of his stock is reduced.

Such a policy would make the common stock entirely unattractive as a purchase if it were announced at the outset, and after the common stock had once been purchased in good faith on the promise of dividends as soon as they were earned, the directors could not, in fairness, extinguish this value by allowing dividends to accumulate on the preferred stock, no matter how much this course might be demanded by considerations of conservative management. If the failure to pay dividends on the common stock resulted from causes outside of their control, an overestimate of profits or an underestimate of expenses, directors could not be blamed by the common stockholder, but the adoption of a policy of reserving profits for the benefit of the company, although it might be justifiable and even necessary, when only common stock had been issued, the effect of which would be to make the payment of dividends on the common stock only a remote possibility, would have subjected the directors to severe criticism. No matter how necessary the postponement of preferred dividends might be when judged by the standard of investment requirements, so far as concerns the dividends on cumulative preferred stock, this course is usually

impossible. If dividends on cumulative preferred stock have been earned in any year, the practice is to pay them.

In a few flotations, an attempt has been made to reconcile the necessity of conservatism in the distribution of profits with the demands of the preferred stockholder that he be insured in a prior claim to dividends, by providing that the cumulative feature shall not begin at once, but that the stock shall be made noncumulative for perhaps three or five years, and that when accumulation begins in the case of a seven-per-cent preferred stock, for example, it shall start with two per cent and increase in an ascending scale. It is difficult to sell preferred stock with such provisions included in the contract with the corporation, since they amount to a plain declaration to whoever buys the stock that the company may not pay him any dividends for perhaps five years, and that, at the end of that time, they may pay him dividends only on the ascending scale of accumulation.

The difficulties in the administration of a company's income account which result from the existence of cumulative preferred stock can only be avoided by limiting the amount originally issued to the sum on which the surplus revenues of the company will be sufficient to pay a dividend, and at the same time leave a balance sufficient for the current requirements of the business, and, within a reasonable time, for a dividend on the common stock. While this requirement is sound in theory, if we may judge from the practice of American corporations which include cumulative preferred stock as a part of their original plans of capitalization, it is found, in most cases, impracticable.

The rate of dividend established on preferred stocks is usually either six or seven per cent on industrials, and five per cent on public service corporations. Railroad preferred stocks, issued in reorganizations, usually pay four per cent. The varying rates of preference in stocks issued by these different classes of companies represent the relative standing of these investments. In only a few cases, do we find preferred dividends higher than seven per cent. The first pre-

ferred stock of the United States Rubber Company and the preferred stock of the Virginia-Carolina Chemical Company pay eight per cent. Out of 101 issues of preferred stocks only fourteen paid over seven per cent. With the scale of capitalization adopted by most companies, involving large issues of cumulative preferred stock, and basing our conclusions on the experience of these companies during the last ten years, a cumulative rate of dividend of seven per cent is, for the average company, too high for the security of common stock. In fixing the high rate of seven per cent, the effect has been in many cases to absorb the surplus earnings which, in reasonable certainty, would be available for the preferred stock, and to leave the common stock only the chances and uncertainties of profits.

Preferred stock may be cumulative not merely as to dividends, but also as to assets. Charters sometimes provide, as does the charter of the American Car & Foundry Company, that the board of directors shall have power, without the assenting vote of the stockholders, to sell, or otherwise dispose of, any or all of the property of the company. When these large powers are given to the board of directors, the following situation may, conceivably, arise: The company may be earning barely enough to pay dividends on the cumulative preferred stock. Perhaps preferred dividends may have been passed for several years, piling up against the common stock, which may, as a result, have but a nominal value. Some outside interest, seeing a chance for a speculative profit may buy up this low-priced common stock, elect a board of directors favorable to his plan, and sell the property of the company. In case such a sale is made, and unless the preferred stock is also given preference in the distribution of assets, the common stock will participate equally with the preferred in the proceeds of the sale, although its market value, based on its prospects of dividends, was small. In order to guard against such a contingency, which, it must be admitted, is somewhat remote, it is not unusual to find preferred stock made cumulative both as to assets as well as

dividends. A provision in the certificate of incorporation which gives this preference is worded somewhat as follows:[1]

> In the event of any liquidation or dissolution or winding up (whether voluntary or otherwise) of the corporation, then, before any amount shall be paid to the holders of common stock, the holders of preferred stock shall be entitled to be paid in full for the par amount of their shares, and in addition thereto all arrears of dividends—that is to say, an amount sufficient, with the dividends actually paid, to make seven per cent for each year; and after the payment to the holders of the preferred stock of such par value and arrears of dividends, the remaining assets and funds shall be divided and paid to the holders of common stock, pro rata, according to their respective shares.

Out of the issues already referred to, thirty-seven have these provisions. The dissolution of corporations almost always follows bankruptcy proceedings which result in the sale of all the property for the benefit of creditors, and the preference as to assets given to the preferred stockholder can hardly be regarded as a practical safeguard. The end desired, namely, the protection of the preferred stockholder against speculative dissolution of the company can be as well attained by providing that the directors may not dispose of the property of the company without the consent of two thirds or three fourths of both classes of stock. Such a provision does not discredit the common stock, while the provision that the preferred stock shall be cumulative as to assets as well as to dividends is apt, if the common stockholder looks into it, to dishearten him.

It is the danger of bankruptcy against which the preferred stockholder is particularly interested to guard by limiting the ability of the directors to incur mortgage indebtedness. He accomplishes this by a provision, similar to the following, inserted in the certificate of incorporation where

[1] Extract from the Amended Certificate of the International Harvester Company.

preferred stock is issued, taken from the articles of incorporation of the Crucible Steel Company:

> The corporation shall not mortgage any property except by purchase-money mortgage, without the written assent, or pursuant to the affirmative vote in person or by proxy, at any meeting called in accordance with the by-laws, of the holders of at least two thirds of its preferred stock then issued and outstanding.

The preferred stockholder may not be satisfied with preference in dividends and assets. He may also demand the right to participate with the common stockholder in distributed profits after his preferred dividends have been paid. When such participation is allowed, it is usual to provide for a certain dividend upon the common stock, say six or seven per cent, and that the preferred stock shall thereafter share with the common on some agreed basis. The Associated Merchants Company, for example, agrees that for every one per cent dividend paid in excess of seven per cent one half of one per cent is to go to the preferred stock. Such a provision is unusual. Out of the list under examination we find only three preferred stocks which are made participating.

Another method of allowing preferred stock the benefit of cumulative preference in dividends, combined with a large share in contingent profits, is to make the preferred stock convertible into common stock on an agreed basis, usually at par. The Associated Merchants Company and the Domonion Coal Company are, however, the only examples in the list above referred to where this privilege has been given. The position of the holder of cumulative six- or seven-percent stock, issued on a liberal scale, is far superior to that of the common stock, and the chances that conversion would have proved advantageous are so remote as to render the inducement of the privilege of converting into common stock of little value to an intending purchaser of preferred stock. The inclusion of this feature, moreover, would make the

common stock less attractive to the investor, since it is already subjected to the serious handicap of a high cumulative dividend.

In original issues of preferred stock, special voting powers may be given to this security. The preferred stock of the Rock Island Company, for example, elected a majority of the board of directors. It is unusual to find this provision. The rule is that preferred and common stock, when both are issued at the same time, have equal voting power. A wholesome provision for the protection of the preferred stockholder is that the common stock shall forfeit its vote whenever preferred dividends remain unpaid for the space of a year. A variety of other safeguards and restrictions upon the corporation issuing preferred stock are used but not, as a rule, with original issues. They will be taken up in detail in a later chapter.

Common stock is a feature of every financial plan. When no public flotation is expected, the amount of common stock is a matter of no consequence. It usually represents the controlling interest, and is sometimes placed at a nominal figure. In public flotations, however, common stock is usually issued to capitalize anticipated earnings. It is supposed to represent the future profits of the property. The industrial trusts, for example, issued preferred stock for the value of the separate companies before consolidation. The common stock was supposed to express the economies and profits accomplished by the consolidation, as well as those arising out of the natural growth of the business. Common stock is usually sold at a low figure, liberal representations concerning anticipated earnings being made to influence its purchase. These representations are not often realized.

The practical limit of the amount of common stock issued by a majority of the companies has been the amount of stock from which the largest amount of net returns over expenses could be realized by those into whose hands the stock came in exchange for property sold to the company. For example, if $5,000,000 could be sold at eighty, and $15,000,000 could

be sold at forty, the second figure will be the one selected. The money value of stock sold to the public decreases at a less rapid rate than the increase in the amount of stock offered. It might seem that since the common stock represents the entire value of the company over the claims of the bondholders and the preferred stockholder, it would be a matter of indifference to the market value of the stock whether it be fixed at $5,000 or $5,000,000. Such, however, is not the case. To the mind of the average buyer of stock, the figures printed on the face of the certificate convey a pecuniary suggestion, an idea of actual value. The more of these certificates that are issued, up to the point where it becomes apparent that the company will never be able to pay dividends on its stock, the larger will be the amount of money for which they can be sold. This fact explains the excessive capitalization of corporations whose stock is to be offered to the public. Up to the present time, no effective means has been devised to check this practice, save in a few states which control the security issues of public service corporations.

In conservative flotations, where it is not intended to immediately dispose of the common stock, and where those who sell their property to the corporation expect to retain control for a considerable time, holding their stock as an investment, a different standard is adopted. By such companies, the amount of common stock is fixed at a figure on which dividends, after a few years of successful operation of the company, can probably be paid. Common stock is frequently given to engineers who may be put in charge of a property during its early stages, with a view to increasing their diligence. It may also be given to banks and trust companies as a bonus for the loans which they make a new company. If the amount of stock issued was excessive and out of all reason, as it has been in the case of many large public flotations, there would be no purpose in holding it. Indeed, the desire would be to dispose of it as soon as possible. With a conservative capitalization, however, it is frequently possible to make more money by retaining the stock than by im-

mediately selling it. Corporations promoted by established banking houses are also conservative in their common stock capitalization. These bankers have a reputation to maintain which is indeed their chief asset. They cannot afford to risk a flotation with whose bad results they may at some future time be reproached by some of those whom they may have victimized.

As a general proposition, if a corporation pays four per cent on its common stock after five years' operation, its common stock capitalization must be regarded as conservative. It is unreasonable to expect common dividends at once or before an adequate reserve of earnings has been established, but within five years, if the business of the company is sound, if it is properly managed, and with normal conditions of demand, it should pay four per cent on its common stock.

NOTE—I have designedly omitted all discussion of the question of overcapitalization. This is a point still in controversy, and likely to be unsettled for several years. In a text book, its discussion would be unprofitable. In order to avoid the suspicion of shirking a vital issue, I may state, as my own opinion, that irrespective of the merits of this method of settlement, the final solution of the problem will be found in a limitation of security issues, especially by public service corporations, to the cash cost or fair value of property constructed or purchased. This fair value will be, moreover, determined not by the directors of the purchasing company but by some disinterested public authority. In my opinion, this method of restricting security issues which are to be sold to the public, would not interfere with the development of any legitimate enterprise, and would operate to increase the security of investments.

CHAPTER IX

METHODS OF PAYING FOR STOCK

We take up next the methods of paying for stock. We shall first consider the cases in which the stock is paid for in whole or in part by cash. Stock sold bv the corporation for cash is of two classes, assessable or full paid, according as the payment is full or partial. Full paid stock may be paid for at one time or in installments. When stock is issued for work of construction, such as the building of a new line of railroad or the erection of a mill, the company's payments are protracted over a considerable period. There is no purpose, therefore, in securing the full amount of the subscription at one time. The money is arranged to be paid as it is needed, the payments sometimes being extended over a year or even longer. The practice in such cases is not to pay dividends on the new stock until the entire amount has been paid up, but to allow the subscribers interest on their installments as these are paid into the treasury of the corporation.

Assessable stock is of a different character. Here the payment is made in cash and in promises to pay cash. The subscription to $10,000 of stock, par value $100, "ten per cent paid," will be $1,000 in cash, and $9,000 in a promise to pay that amount when called for by the board of directors. The advantages of this form of stock, viewed from the standpoint of the corporation, are considerable. In the first place, the issue of assessable stock makes it possible for a company embarking in a new enterprise to guard against underestimates of the cost of construction. If, for example, an interurban railroad is estimated to cost $500,000, and subscriptions to

$500,000 are secured, and supposing, as frequently happens, that the cost is raised by unforeseen circumstances to $750,000, it then becomes necessary for the officers of the company to apply to the stockholders for additional subscriptions which they can usually obtain only by issuing preferred stock which may not have been contemplated in the original plan. Under such circumstances, however, it is practically impossible to persuade stockholders to subscribe to an additional amount of common stock. They are apt to lose confidence in the managers of the enterprise whom they hold responsible for the mistakes in the estimates of construction cost, and may even oust the directors from office and put in a new control. The writer once heard a banker who had been interested in promoting an iron furnace enterprise in Eastern Pennsylvania, say that it was easier to procure $2,000,000 at the outset than to secure $200,000 after $1,000,000 had been represented as all that would be necessary. If the method of assessable stock is adopted, stock can be issued to the amount of $1,000,000, with an understanding, which is not, of course, a part of the subscription contract, that only $500,000 need be called. If, then, it is found necessary to call $250,000 more, this can be secured without difficulty since the stockholders will not wish to see their original investment forfeited by a sale of their stock by the company to pay up the assessment.

Assessable stock can also be issued to capitalize future profits when it is not deemed prudent to pay too large a dividend. If a street railway consolidation requires $15,000,000 cash, and if public sentiment will not tolerate more than six per cent in dividends on the stock of a public service corporation, it may be possible to capitalize the new enterprise at $45,000,000, calling one third of the amount and allowing the balance to stand as a liability of the stockholder. If the earnings of the company warrant, the six per cent dividend can be paid on $45,000,000 which in reality is eighteen per cent on the amount paid in. While this method has been occasionally employed, however, it cannot be considered as a general practice among public corporations.

Assessable stock is not a popular form of security. The unpaid portion of such stock operates to depress its value. Investors can never be certain when the directors will call assessments. When a call is made, those holders who are unable to respond must throw a portion of their stock on the market to obtain sufficient funds to pay the assessments on the remainder. These sales not only make the value of partly paid shares irregular, but open the way to unscrupulous directors to enrich themselves at the expense of the stockholders by buying the stock on the decline and selling at the advance which, since the real value of the stock has been increased by the assessment, is likely to follow its payment.

The investor has a rooted objection to purchasing assessable stock because of the uncertainty as to the amount he will be called upon to pay, and because of a well grounded distrust of the danger of manipulation by directors who are in a position to control the times and amounts of the calls. When stock, therefore, is to be sold to investors, it is necessary to make it full paid. This can be done, either by paying for the stock in cash, or by issuing it in exchange for property or services. The only way in which promoters can make a profit on stock which has been paid up in cash is to sell this stock at a premium. Since we are dealing here, it will be remembered, with new enterprises, whose earning power is yet to be demonstrated, and which must offer inducements to investors to secure funds, this method is impossible, at least in the United States. In Germany, where the law forbids the stock of any new enterprise to be listed for sale until the company has been in operation for a year, and where the amount of capital is strictly limited, it frequently happens that a large premium can be secured, and a considerable profit realized. In Great Britain, where founder's shares, entitling their holder to a disproportionately large share of profits are used to compensate promoters, these shares frequently sell at a high premium. In the United States, however, where the law allows listing at once, and founder's

shares are not as yet employed, the risks of new enterprises are so great and the demand for banker's capital so heavy, that very little time is allowed to elapse between the completion of the construction or consolidation and the sale of its securities. This unwillingness of the investor to buy securities of new enterprises, except on very favorable terms, extends to its bonds. To sell bonds, it is sometimes necessary to give a bonus in stock from which the corporation will receive no cash whatever. This stock, to be attractive to the investor, must be full paid.

From these several considerations, it is evident that some method must be devised of making stock full paid, which will not require the payment of its par value in cash. This method is the issuing of stock for property or services. The laws of every State permit the directors of corporations to purchase such property as it may need by issuing its stock. Corporations are also allowed to make contracts for construction work, payment for which is to be made in bonds and stocks. One of the most liberal statutes permitting the purchase of property with stock is that of New Jersey. Section 49 of the General Corporation Act of New Jersey is as follows:

> Any corporation formed under this act may purchase mines, manufactories, or other property necessary for its business, or the stock of any company or companies owning, mining, manufacturing, or producing materials, or other property necessary for its business, and issue stock to the amount of the value thereof in payment therefor, and the stock so issued shall be full paid stock and not liable to any further call, neither shall the holder thereof be liable for any further payment under any of the provisions of this act; and in the absence of actual fraud in the transaction, the judgment of the directors as to the value of the property purchased shall be conclusive, and in all statements and reports of the corporation to be published or filed this stock shall not be stated or reported as being issued for cash paid to the corporation, but shall be reported in this respect according to the fact.

The New Jersey Corporation Law also authorizes the issuance of stock and bonds for services rendered in the following section:

> Corporations having for their object the building, constructing, or repairing of railroads, water, gas, or electric works, tunnels, bridges, viaducts, canals, hotels, wharves, piers, or any like works of internal improvement or public use or utility, may subscribe for, take, pay for, hold, use, and dispose of stock or bonds in any corporation formed for the purpose of constructing, maintaining, and operating any such public works, and the directors of any such corporation formed for the purpose of constructing, maintaining, and operating any public work of the description aforesaid, may accept in payment of any such subscription, or purchase, real or personal property, necessary for the purpose of such corporation, or work, labor, and services performed or materials furnished to or for such corporations to the amount of the value thereof, and from time to time issue upon any such subscription or purchase, in such installments or proportions as such directors may agree upon, full paid stock in full or partial performance of the whole or any part of such subscription or purchase, and the stock so issued shall be full paid and not liable to any further call.

The method described in this section is that usually followed for making stock full paid. After the corporation is organized, the first meeting of the stockholders held, and the directors elected, a proposition is made to the directors to sell to the corporation certain property—patents, mining property, factory property, railroads or stocks and bonds, for all or part of the securities of the new corporation. The only limit in most States to the amount of bonds which may be issued under these circumstances is the conclusion of the directors as to their need of capital and their ability to sell these bonds. The law does, however, limit the stock "to the judgment of the directors as to the value of the property purchased." As long as this judgment is an honest judgment,

and there is no suspicion of fraud in the transaction, it will be held to be final, and cannot be questioned in subsequent proceedings against the corporation.

In fixing a value upon the property purchased, or upon work which is to be done for the company, the directors are not to be limited to the sum for which the property would sell for cash, or to the amount for which the services could be purchased for cash. The payments are not made in cash, but in evidences of debt, and in certificates of rights to participate in profits. The ability of the corporation to pay interest on these bonds is yet to be demonstrated. The profits, in which the holders of these shares of stock are to participate, are yet to be realized. Anyone who transfers property or contracts to perform services for a company, in exchange for securities, has a right to charge a much higher price than if he is to receive cash for his property or services. The corporation, for its part, is warranted in paying a much higher price for property or services expressed in terms of securities. When the vendors or contractors will agree to accept, instead of cash, which the corporation might have great difficulty in securing, its bonds and stock, making it unnecessary for the corporation itself to raise more than a moderate amount of money for working capital, they are entitled to liberal terms. The valuation placed upon property or services by directors is generally accepted by the courts. They will not question the amount of stock to be issued, either in behalf of disgruntled stockholders, or of creditors, unless it appears that the transaction is tainted with fraud.

Practically speaking, the only risk attaching to the overvaluation of property, when purchased with stock, arises in case of the subsequent bankruptcy of the company issuing the stock. If the creditors of the corporation can prove that stock was fraudulently issued, and if they can find this stock in the possession of the original incorporators, or those for whom these incorporators were acting, it has been established that the receiver of the corporation, acting for the creditors, can recover from the subscribers such part of the difference

between the par value of the stock which they received for their property, and what the court will regard as a fair value for the property measured in stock, as will make up the difference between the realizable value of the company's assets, and the amount of the creditor's claims. Under these circumstances, the so-called full paid stock of the company, if it has been issued to an excessive amount, is held to be assessable stock, the corporation not having received full value, and those who have received the stock, if it is found in their hands, are liable for the difference between the selling price and the par value of the stock.

The theory of the law under which liability attaches, is that the capital of the corporation takes the place of the individual liability of the partners, so far as the creditors are concerned, and that creditors have the right to assume that the capital of the company has been paid up in full, either with cash, or with property and services taken at a fair value. When, therefore, the company fails, and the creditors are able to prove that the stock was issued for property and services at fictitious and excessive values, it is held that they can recover through the corporation from the original subscribers if they find the stock in their hands. This liability does not attach to innocent holders for value, and it is a question whether the original subscribers may not divest themselves of all liability by transferring their stock on the books of the company.

The purchase of property with stock of a corporation directly from the owner presents no difficulty. When services are to be performed for the company, however, in order to make the stock full paid, it is necessary to interpose between the final purchaser of the stock and the corporation an agency known as the Construction Company, which exchanges its contract for services to be performed for the stock and bonds of the company in whose interest the work is to be done. A construction company is not often what its name implies. As a rule, it does not expect to carry on any work of construction. It has no force of engineers at its disposal.

It expects to let the contracts connected with the work to others. It is merely a device to make stock full paid so that it can be sold to the investor without any liability attaching.

A typical construction company transaction is outlined in the following:

OFFERING OF BONDS AND STOCK

OF

THE DENVER NORTHWESTERN & PACIFIC RAILWAY COMPANY

Payments to be Made in Instalments or at Once at Subscriber's Option.

DENVER, Col., October 21, 1902.

The Colorado-Utah Construction Company has contracted with the Denver Northwestern & Pacific Railway Company to build and equip, approximately, 500 miles of its railroad between Denver, Col., and Salt Lake City, Utah. The contract provides for a substantial roadbed, steel rails eighty pounds per yard, and a modern standard passenger and freight rolling stock equipment. Payments under this contract are to be made in the bonds and stock of the Railway Company which are now offered for subscription.

Under the provisions of the construction contract, there will be issued by the Railway Company to the Construction Company $40,000, and no more, of the first mortgage four-per-cent bonds of the Railway Company and $20,000, par value, of its full paid preferred stock and $20,000, par value, of its full paid common stock for each mile of main track of railroad as it is built, equipped, and turned over to the Railway Company for operation.

The authorized capital stock of the Railway Company is $20,000,000, of which $10,000,000 is five-percent noncumulative preferred stock and $10,000,000 is common stock.

The first mortgage of the Railway Company to The Mercantile Trust Company, of New York, provides for an issue of not exceeding $22,500,000 of Fifty-

Year Four-Per-Cent Gold Bonds, of which issue the balance of $2,500,000, remaining after the payments to be made under the construction contract will be held in reserve by the Railway Company.

The Colorado-Utah Construction Company will receive, through its designated depositaries, applications for subscriptions in $1,000, and multiples of $1,000, to the bonds and stock of the Denver Northwestern & Pacific Railway Company above mentioned until November 16, 1902, after which no further applications will be received.

The Colorado-Utah Construction Company reserves the right to scale down or to reject any and all applications.

The terms of the subscription agreement, which is to be signed by the parties whose applications shall be accepted by the undersigned, provide that payment shall be called in as money is required by the Construction Company for the purpose of fulfilling its contract with the Railroad Company, but that in no event shall the subscribers be required to pay more than ten per cent of their subscriptions in any one month; but that each subscriber shall have the option to pay the whole amount subscribed at once. Each subscriber will receive, as provided in the subscription agreement, for each $950 paid:

$1,000 four-per-cent fifty-year First Mortgage Gold Bonds of the Railway Company,

$250 par value of the Non-Cumulative Preferred Stock, and

$250 par value of the Common Stock of the Railway Company.

Until the bonds and stock of the Railway Company are engraved, executed, and received by the Construction Company under the terms of its contract with the Railway Company, the Construction Company will issue to the subscribers, as any payment is made upon their subscriptions, its receipts providing for the payment of interest from the date of such payment at the rate of four per cent per annum until the bonds and stock subscribed for are ready for delivery to the subscribers, subject to adjustment to be made as to any interest then accrued upon such bonds.

The one half of the common and preferred stock of the Railway Company not offered for subscription will be owned by the Construction Company.

. . . . .

The above offer is made upon the terms above stated, subject to advance or withdrawal without notice, and the undersigned recommends the bonds and stock of the Denver Northwestern & Pacific Railway Company as a safe and profitable investment.

THE COLORADO-UTAH CONSTRUCTION COMPANY,

By SYLVESTER T. SMITH, *President.*

The foregoing shows very clearly the service which the construction company performs. The Denver Northwestern & Pacific Railway property, at the time this offer was made, was not yet built. The public was expected to furnish a large part of the funds necessary for the work. Since the enterprise was not yet in being, it was necessary to offer special inducements to the subscribers to the bonds in the shape of bonus in stock. This stock bonus could not be legally offered by the railway company. The construction company was therefore employed to contract with the railroad company to build its line in return for securities. These securities the construction company forthwith offered to the public on the terms set forth in the advertisement.

The above method is not often employed. As a general thing bankers profoundly dislike to handle any other securities than those issued by going concerns. It is usually necessary, therefore, for a considerable amount of capital to be raised by the construction company, with which it margins loans made with financial institutions on the security of the stock and bonds which it receives from the railway company as the work progresses. The following is a detailed description of a typical operation of this character:

A construction company is organized for the purpose of building a line of railroad. The shares of the construction

company are offered for subscription to obtain working capital. Simultaneously with the organization of the construction company, a railroad company is incorporated. An agreement is now made between the railroad company and the construction company for the building of a railroad, and for supplying a certain amount of equipment for its operation after completion. The construction company agrees to secure the necessary rights of way, and to construct or procure for the railroad company, upon such routes as it may select for the purpose, a certain line of railroad. It is stipulated that the work to be performed by the construction company shall be in accordance with standard specifications, and under the supervision and control of the chief engineer of the railroad company. All the contracts for the grading, rails, equipment, and all other necessary work for the completion of the railroad, will be let by the construction company.

For the service performed in constructing the railroad and furnishing a certain amount of equipment, the railroad company agrees to deliver to the construction company its full authorized capital stock at a certain rate per mile of railroad constructed, and also bonds for each mile so constructed. The bonds issued shall be a first lien on the property, and before any shall be delivered by the railroad company to the construction company, the trustee under the mortgage shall be furnished with a certificate of the completed mileage by the chief engineer of the railroad company. The construction company, upon the completion of its contract, becomes the owner of all the stock and bonds of the railroad company, except that stock which was subscribed for at the time of the incorporation of the railroad company, and that necessary for the qualification of the directors.

The method of financing the construction of the railroad involves the joint use of the credit of both the railroad and the construction company. At the outset, the railroad company has no property and therefore it has no credit. The construction company has a cash capital and by the use of this capital of the construction company, the railroad com-

pany gradually comes into possession of railroad property represented by securities which form a basis for loans. An illustration of this follows.

"A construction company is formed with a capital of $2,500,000. Out of this capital, it purchased mining interests which cost $500,000. In order to develop this operation, a railroad company is formed, and on the strength of the balance of the capital of the construction company, contracts are let and work begins. The mileage to be constructed is 200 miles, on which stock at the rate of $16,500 per mile, and bonds at the same rate can be issued. Each mile of railroad constructed and with the equipment furnished, costs the construction company $18,000 per mile. On a mileage of 200 miles, the cost would be, approximately, $3,600,000.

"Under the terms of the agreement of the construction company with the railroad company, as the work progresses in sections of so many miles, the construction company becomes entitled to bonds at $16,500 for each mile so constructed upon delivery of the certificates of the chief engineer of the railroad company certifying to such completed mileage, to the trustees under the mortgage.

"After paying for its coal estate the construction company's available capital would be $2,000,000. Upon the basis of a cost of $18,000 per mile, with this capital, it can construct approximately 110 miles, under which it becomes entitled to receive bonds to the amount of $1,815,000. This will use all the available funds of the construction company. With the bonds thus received (which would be in the form of temporary certificates) it now seeks loans from financial sources, pledging these certificates as collateral, on the basis of sixty per cent of their face value. Assuming that the loan can be made with this collateral on this margin, the construction company will obtain funds for the further construction to the extent of $1,089,000, which will complete an additional sixty miles, upon completion of which the construction company will be entitled to receive bonds at the rate of $16,500 per mile, or $990,000 of bonds. To complete the remaining

thirty miles under contract, the construction company will require an additional loan of $540,000, and if the same method of borrowing on the pledged collateral is pursued, it will require $900,000 of the $990,000 bonds received for the former sixty miles completed, which will leave in the hands of the construction company $90,000 of bonds, plus those issued for the last thirty miles ($495,000) or a total of $585,000 of bonds with all the capital stock, amounting to $3,300,000, and the coal estate costing $500,000, as assets, and with liabilities of loans to the amount of $1,629,000 and capital stock of $2,500,000.

"The property of the railroad is then put into operation. The receipts and expenses are such that its earning power will be sufficient to meet the interest on the bonds, which will tend to increase their value. A syndicate is now formed to take the bonds at ninety. The $2,715,000 of bonds held as collateral are sold, realizing in cash $2,443,500. From this sum, the loans amounting to $1,629,000 with interest are paid off, realizing approximately $800,000 in cash. The $585,000 bonds among the assets of the construction company are sold at ninety, realizing in cash $526,500 which, with the $800,000 remaining from the loans, furnishes $1,326,500 of cash. With this cash the construction company's capital stock, amounting to $2,500,000, could be proportionately paid off, thus reducing it to $1,173,500 with the $3,300,000 capital stock of the railroad company and the coal estate of $500,000 as remaining assets.

"In order to wind up the affairs of the company, and to distribute the stock of the railroad company to the construction company stockholders, it may be estimated that the stock is worth $25 per share (par value $50). For the 66,000 shares, $1,650,000 could be realized, which would be distributed to the stockholders out of the proceeds of the sale, amounting to $1,173,500, leaving a credit balance of $476,500 with the coal estate. It has been assumed that all the securities would be sold for cash. The various securities can be distributed among the stockholders of the construction com-

pany. The stockholders might also become members of the underwriting syndicate to take bonds at ninety."[1]

One more problem arises in connection with the issuing of stock for property or services. Every new enterprise needs working capital, and the financial plan must provide for this. A portion of the proceeds of the securities of the new company must be put into the treasury to serve the current needs of the corporation. The stock of the new company cannot be sold at par. It must either be sold at a discount, or given away as a bonus with bonds sold. The latter method is generally forbidden the corporation by law. The stock can be made full paid by transferring it for property or services, and then can come into possession of the corporation by gift. The company can sell this stock or give it as a bonus with the sale of bonds as it sees fit. The ordinary method of accomplishing this result is for the vendors of property, or the construction company, after the stock has been made full paid, to donate to the company a certain portion of what they have received, to be placed in the treasury and sold to provide working capital.

It may be argued for the construction company that without this agency whose subscribed capital guarantees the loans made on the security of bonds, enterprises would have great difficulty in raising money for construction. Investors are wary of new concerns which are not on a going basis. Investment bankers usually demand a showing of earnings before risking any money in such securities. The construction company, in return for the opportunity of large profit which its dealings with the railroad company presents, is willing to take risks with new enterprises, and to co-operate with financial institutions in furnishing money for construction, on the security of the bonds of the new company.

A potent reason for the use of the construction company,

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[1] This account of the operations of a construction company was obtained from a confidential source, on the promise that no names were to be mentioned.

aside from the evident advantages to the corporation which have been enumerated, is the fact that this is the only way in which the promoters of an enterprise which does not require the purchase of property, but, instead, involves the building of a trolley line or railroad, to bring into existence property whch did not exist before, can make any money for themselves out of the scheme. Even if the law permits the railroad company to sell its stock as a bonus with bonds, and supposing a railroad company sells these securities direct and the money is placed in its treasury, these funds must be spent for the benefit of the corporation. There is no way in which the promoters can make any profit from them except by subscribing to the stock and holding it for an indefinite period until it shows some value. By utilizing the construction company, however, they can make a contract with the railroad company, which will involve the payment to them of a sufficiently large amount of securities to reimburse their expenses, and, at the same time, give them an immediate profit in case their calculations have been wisely made.

CHAPTER X

THE SALE OF SECURITIES

We have now reached, in the development of our corporation, the time when it is necessary to arrange for its permanent financing. Up to this point, the money which has been put into the enterprise has been advanced by members of the promoting syndicate. These advances are intended to be temporary. Both the members of the syndicate and the banks from which they have borrowed expect to be repaid when the securities are finally sold. Although the construction period may be prolonged for several years, either because of unforeseen difficulties, or because it is deemed essential that the enterprise should make a fair showing of earnings before its securities are offered for sale, the promoters wish to make this period of development as brief as possible. As soon as the company is in a position to make an attractive offer of stocks or bonds, the securities are sold.

There are two methods of selling securities; either to the public direct or to investment bankers. The security business is organized along lines generally similar to the business of producing and selling commodities. The corporation corresponds to the manufacturer, the investor to the consumer. Between the manufacturer and the consumer, stands the distributer. The wholesaler, in the field of commodities, and the banker, in the field of securities, occupy similar positions. The business of the private banker has assumed great importance in recent years. At one time it was thought that the function of distributing securities to the public might be taken over by the commercial banker who would buy from

the corporation and sell to his own depositors. A number of the larger banks and trust companies have gone so far as to establish bond departments. But while there is a certain amount sold by commercial banks to depositors, for the most part through their bond departments, as a rule banks dispose of such bonds as they may purchase, in the general investment market, making no special effort to interest their depositors, on whose funds they can make a larger profit by lending them in the ordinary course than by using them in the purchase of bonds. It is now admitted that the bond business, as a branch of mercantile industry, does not belong to the commercial bank, and it is properly left to a special kind of financial institution.

The investment banker on his part, however, may advantageously carry on certain departments of the business of the commercial bank. The investment banker offers investment securities suitable to the needs of various classes of investors, furnishes to investors free of charge accurate information on securities, receives accounts subject to check, and allows interest on daily balances, collects and remits dividends and interest; negotiates collateral loans for various classes of borrowers, executes orders for the purchase, sale, or exchange of securities on the stock exchanges; and, in some cases, carries on the business of foreign exchange. The investment business is, however, the primary function of the private banker. To this all his other activities are subordinated.

The private banker organizes his business on the lines of a jobbing house. He has a large number of present, prospective or potential customers on his list sometimes running into the thousands. He circularizes these customers at intervals with letters and circulars, follows up all inquiries with attractive prospectuses, and also brings the merits of his wares to the attention of the buyer by means of public advertisements. The investment banker enjoys special advantages for the financing of his business. So far as possible, he aims to make his sales and purchases coincide. In an active bond market, it is not unusual that a large issue should be sold

before the banker is obliged to make his final payment. When a stock of securities is to be carried, however, the investment banker employs his established lines of credit with banks and trust companies, pledging the securities which he is holding as collateral for loans on various margins of security, depending on the quality of the bond or stock pledged and the conditions of the loan market. By the liberal employment of his credit, he is able to do a large business with a comparatively small capital. A bond house with a capital of $500,000 is a very substantial institution of its class.

These investment bankers stand ready to purchase the securities of corporations for cash. The prices which they will offer are, of course, below those which they expect to receive, the margin of profit demanded depending on the salability of the security, and the salability usually depending on the quality determined from an investment standpoint. The question now arises, shall the promoters of the new corporation sell the securities to bankers, or shall they offer them direct to the public? This question can be answered, without serious qualification, and with few exceptions, in favor of dealing with the banker.

There are great advantages to a corporation in placing its securities with investment bankers. The cost of obtaining the required capital is definitely determined in the banker's contract. If the bonds are to be sold at $85, or $90, or $92½, the exact amount of money which will be received from these bonds is known. The money, moreover, will be paid at a definite date, so that the syndicate need have no uncertainty about recovering their advances and repaying their loans. The cost to the corporation of selling securities to bankers is also much less than if sales are made direct to the public, and the certainty of return is far greater. The banker, as we have seen, has a permanent organization and an established clientele of customers. This organization is constantly employed in marketing securities. Established banking houses of good reputation have a large number of customers who will buy from no one else. They can count

on a certain amount of money from these customers at regular intervals, which will be spent on the securities which they offer. They are also able to make a market for new securities, for which the demand may be weak at the outset, by exchanging these new bonds on a favorable basis for seasoned bonds of long standing, which its regular customers have purchased in the past, and for which a ready market exists. With a large number of satisfied customers with whom the banker is in constant touch, new issues of securities can be quickly sold by exchange, when direct sale would be impossible. Bankers, moreover, are not obliged to force a market for the securities which they purchase. They can utilize their credit to carry stocks and bonds until a favorable season arrives for selling them.

A corporation engaged in the mining of coal or the operation of an interurban electric railway has none of the equipment for selling securities. If it desires to sell bonds direct to the public, it will be necessary for the company to construct a selling machine for the express purpose, and since it cannot keep this organization together after the necessity out of which it originated has passed, its cost will be excessive. It must rely on newspaper advertising to discover its customers, and newspaper advertising is an expensive method of selling securities. The corporation, while it might have a good credit for the purposes of its own business, would have great difficulty in establishing a credit with which to finance its venture into the security business. The same banker might look with favor on a proposition coming from an investment banker to lend money on the securities of a corporation, which that investment banker had purchased for sale, and might look with extreme disfavor upon a proposition to lend on the same securities offered by the corporation direct.

There is no certainty, when the securities are offered direct by the corporation, as to the cost of selling. The usual method will be to turn the work over to some advertising agency which would undertake, without any guarantee of results, to

sell the securities on the basis of a certain percentage of the proceeds. In some cases, this percentage would run as high as forty per cent, and the selling campaign might, at that, have to be abandoned before half of the securities were disposed of. From every standpoint, the attempt of a company to market its securities direct will be likely to prove unsatisfactory and unsuccessful. The cost will be excessive, the results uncertain, and the risks great.

But while sale to a banker is advantageous to the company, bankers will not purchase every kind of security. They sell to investors, and the securities which they offer must be such as will appeal to their customers. We may distinguish between investment securities and speculative securities. Both the investor and the speculator are so called because they buy stock or bonds of companies which are the owners of productive properties. By means of the corporation which divides its stock or debt into shares or notes of \$50, \$100, or \$1,000 each, and which is managed by officers elected by trustees whom the stockholders select, an individual can become a part owner, or a part creditor, of as large a number of corporations as his capital will allow, without identifying himself in any way with the management of any of these corporations. He has no concern in their affairs, save to receive out of their earnings his dividends or interest, or to increase his capital by selling his stocks or bonds should their price be advanced. Broadly speaking, there are two kinds of enterprises, and two kinds of securities which these enterprises may issue: Those which have been in existence a sufficient time to enable their earning power to be conclusively demonstrated; and those which have not yet demonstrated their earning power, either because they exist only on paper, or because their operations have, as yet, been unsuccessful.

Examples of investment stocks are furnished by such companies as the Pennsylvania Railroad, the Chicago and Northwestern, the Chicago, Milwaukee & St. Paul, among railroads; the Cambria Steel Company, the Standard Oil Company and the General Electric Company, among industrials; the Union

Traction Company and the Chicago City Railway Company, among street railways; the Calumet and Heckla among mines. An examination of these stocks shows the following characteristics: Each of these companies operates an established business, supplying articles or service for which there is a steady demand, and where the processes of the industry are standardized and thoroughly understood. Each one of these companies is efficiently managed. Their costs of production are low, their selling methods are efficient, and their financial management conservative. Each one of these corporations has been profitable for many years. In good times, as well as in periods of depression, their net profits have been far more than sufficient to pay their operating expenses and their fixed charges. Each one of these companies has a record of dividend payments. The directors have dealt fairly with the stockholders in paying to them such part of the profits as could be safely distributed. Anyone who buys the stocks of these companies knows that profits will be earned, and that he will receive as large a part of these profits as can be prudently paid to him.

We have here the requisites of an investment security: an established business, efficient management, assured profits and a conservative distribution of profits to stockholders. If any of these characteristics are absent from a security, it is not entitled to be called an investment, because there is no guarantee to the investor that the income, on the basis of which he buys the stock or bond, will be permanent.

A speculation is illustrated by the stock of The Consolidated Oil Company. This company controls 120 acres of land in the Coalinga district of Southern California, touching so-called "proven land," that is land in which paying oil wells are in operation. This company offers a portion of its capital stock for sale at one third of its par value. "With the proceeds it is proposed to drill a well and it is practically a certainty that we will have at least a 500 barrel well within a few months. If you have carefully read this book you will understand that the profits from this one well should drill

two more and leave some money over for dividends. Then these three should produce enough to drill six more, and so on up to about twenty wells, which the company should have in two years. These twenty wells, remember, will be drilled with profits after the first one, and should make the company over $1,000,000 profits per year." The directors and promoters of this company are not known as men who have been successful in the oil business, and no representations of their previous experience are made in the prospectus. That their means are limited, is shown by the fact that, instead of taking advantage of this golden opportunity themselves, they are forced to appeal to the public to supply the means of developing their proposition. Here are all the elements of a speculation, an enterprise which may or may not be successful. Oil is being produced in California at a profit. The property of this company, if its representations are to be believed, is near the oil reservoir. If oil is discovered, it is probable that it can be produced at a profit. So much can be said in favor of the proposition. On the other hand, there are several unfavorable considerations. Oil may not be found, or if it is discovered, the flow may cease after a short time. The company may not be able to store or transport this oil. The officers, even though honest, having had no previous experience, may prove incompetent. They may involve the company in obligations whose maturity may destroy the value of its stock, or they may fritter away its funds. The Consolidated Oil Company is an illustration of a type of speculation where the company has not yet come into existence, where its future is wholly problematical.

The Allis-Chalmers Company was incorporated in 1901, as a consolidation of companies manufacturing heavy engines, mining and other machinery. This company has outstanding $19,820,000 of common stock, $16,150,000 of preferred stock, and $10,325,000 of bonds. On the preferred stock seven per cent was paid from July, 1901 to February, 1904. Since that time, no dividends have been paid. No dividends have been paid on the common stock from the beginning. Here,

the separate concerns which were merged into this company were profitable, and they have continued to be profitable. The anticipated increase in profits, as a result of the combination, was not, however, sufficient to pay dividends on the stock, which represented a large increase over the combined stock of the merged companies. The Allis-Chalmers Company may some time prove to be an investment, but the earnings up to the present time have not been sufficient to warrant the maintenance of dividends on its preferred stock, and the common stock is apparently a long way off from a dividend. Even the bonds are not considered to be especially safe. The stock of the Allis-Chalmers Company illustrates a type of security in which the business has not been as profitable as was anticipated, and where dividends could not, therefore, be maintained.

The stock of the Westinghouse Electric & Manufacturing Company is issued by a company which, while profitable, and while paying dividends for many years, was yet so badly managed as to be forced into bankruptcy. The stock of this company cannot, therefore, be considered as an investment. Although the management has changed, several years of successful and conservative operation must elapse before the company is completely reinstated in the confidence of the investor, when its securities will be fully acceptable.

The Amalgamated Copper Company and the American Smelting & Refining Company are corporations which have paid out the greater portion of their earnings to their stockholders. In times of prosperity, these stocks sell at high values because of this policy of liberal distribution. During a period of depression, however, dividend payments are greatly reduced. These stocks are, therefore, regarded as speculations.

We see from a comparison of these illustrations, that the characteristics of a speculative security are the exact opposites of the distinguishing features of an investment. If a company is a new enterprise, or if the efficiency of its management is doubtful, or if it has not yet come into a stage of

profitable operation, or if, as happens in rare instances, it has made profits and has not distributed them to the stockholders, or finally, if it has paid out too large a percentage of profits so that it has been obliged to suspend dividends when earnings declined, its stock must be regarded as speculative.

Between the best class of stock investments, of which the stock of the Pennsylvania Railroad is an illustration, and the stock of The Consolidated Oil Company which stands at the bottom of the list, there are degrees of difference, and it is difficult to sharply divide the sheep from the goats. For our present purpose, however, which is to examine the different methods of selling investment and speculative securities, it is sufficient to characterize as investment those enterprises which have already succeeded, or whose success can be confidently predicted from the experiences of similar enterprises operating under conditions generally identical, as for example the introduction of a street railway in a town of 50,000 people, and to distinguish from these, as speculative securities, stocks and bonds of enterprises whose success lies in the future. The distinguishing characteristic of a speculation is the fact that its value depends upon circumstances which cannot be known because the future is intended to reveal them. An investment on the other hand contains no "ifs" or "provideds" or "believes," its value is founded upon certainty. The value of a speculative security is built upon the unstable foundations of probabilities and suppositions.

These two classes of securities correspond broadly to the characters of the people who buy them. The stocks and bonds of established companies, where success is certain, are purchased by investors, speculative securities by speculators. The investor will not buy a security whose value is in any way doubtful. He demands in a stock or bond, before anything else, the virtue of stable value. He must be reasonably certain that his principal is safe, that he can, at any time in the future, disregarding the occasional fluctuations of the

market, sell his stocks or bonds at or near the price he paid for them. If this assurance of safety of principal and certainty of income can be given him, he is satisfied with a moderate return.

The most important investors in the United States are the financial institutions, insurance companies, trust companies, banks and large estates. These institutions demand safety before every other consideration. They are willing to pay high prices for stocks and bonds where the assurance of safety can be given. Besides these institutions, the character of whose investments is determined not merely by prudence but by law, there are a great majority of the wealthy and well-to-do people of the country in the investing class. Their chief concern is to keep what they have. They demand of the securities, into which they put their surplus income, the highest degree of safety and stability, the most complete guarantee of security.

The investor will buy government bonds, well-secured railroad bonds or guaranteed stocks of railroads, municipal bonds, bonds of street railways, electric light or gas companies in large cities, and the best grade of railroad, street railway or gas stocks. Of later years, with much diffidence and hesitation, he has gone into industrials. The preferred stocks of some of the large concerns are now extensively held by conservative investors. The stocks of new industrials, and of oil and mining companies he usually lets alone. This investment demand, concentrated upon a portion of the securities offered for sale, fixes the value of every investment, no matter how high may be the return upon its face value, at a figure which will allow to the purchaser only a small return upon the money invested. There are few safe investments offered for sale on the New York Stock Exchange whose price when compared with their yield in interest or dividends, shows a return of more than six per cent.

When the investment banker is approached by the promoters of a new enterprise, and asked to assist in the flotation, he examines carefully the character of the scheme. The

first thing he demands of the securities which are offered to him, is that they shall be salable. Unless he can sell them at a profit, he will have nothing to do with the scheme. Assuming that the securities are salable, the next question is, can he recommend them to his own customers? It must be remembered that the relation of the investment banker to his customers is a fiduciary relation. He is a wholesaler of securities. By an extensive organization, covering sometimes many states, he keeps in touch with funds offered for investment. He has classified in his catalogues the names, sometimes, of many thousands of people who buy securities; he knows how much money they have to invest and when this money will be available. He has an organization of salesmen who make regular visits to his customers, and he carries on an extensive correspondence with them to influence their purchases. This business the investment banker expects to be permanent. If he sells a bond, maturing in ten years, he has a record of that sale, and when the bond is paid off, he expects to be on hand with a new bond to take the place of the old one. He aims to cultivate, therefore, by every means in his power, the good will of his customers. The basis of that good will, the foundation upon which his business must rest, is the investment quality of the securities which he offers for sale. In his literature and through his salesmen, the banker lays primary emphasis upon the safety of the securities which he offers. He recommends them to his customers, and ordinarily he has bought them himself, before he offers them for sale. His constant endeavor is to protect his customers against loss. He will carry these efforts, in some cases, so far as to repurchase bonds concerning whose security there may be a doubt, or to undertake at considerable expense and trouble, the work of reorganizing bankrupt companies whose bonds he has sold, so that they may again be put upon a solvent basis.

A man in such a business as this cannot recommend speculative bonds or stocks to his clients. He might indeed sell a large amount of doubtful securities during a period of

good times which would be bought from him by his clients because of their confidence in him, but when depression overtook these shaky enterprises they would go down, and with them would go the good will of the banker's business. A long record of successful flotations is not sufficient to protect a banking house against the discredit of offering and recommending securities which are not good, and whose quality could have been revealed by an investigation.

An illustration of the caution displayed by reputable financial institutions in standing sponsor for new and untried companies, so far as to recommend their securities, is furnished by the following letter received in answer to an inquiry concerning the merits of a Mexican mining proposition which had announced that subscriptions to its bonds would be received at a prominent trust company, large use being made of the trust company's name in the advertisements. The inquiry addressed to the trust company was as follows:

> Dear Sirs: I have received certain information on the proposition offered by the ——— ———. These reports are extremely interesting, and I have given them careful attention. I should like, however, to have your own opinion of the merits of the debenture bonds as a safe investment.
>
> The Corporation ———, by its Vice-President, Mr. ——, has heartily recommended them, and I presume you will have no hesitation in confirming his statement that he believes them to be a safe and profitable investment.

The reply of the trust company is as follows:

> Dear Sir: We have your favor of the 18th inst. In reply thereto would say that following our invariable policy, we regret our inability to advise you in the matter of the investment referred to. Our duty is merely to receive such subscriptions as may be tendered on behalf of the ——— ——— ———, and we have been selected to countersign the bonds. The parties interested in the matter have come to us properly recommended.

The statements contained in the advertisement and circulars are the statements of the ——— and not of this Company.

Yours very truly,
(Signed) ——— ———,
Second Vice President.

If the securities of the new company are of a speculative character, it is evident that the banker cannot purchase them directly and offer them as his own property to his customers. He can, however, insure or guarantee their sale. The trust company just mentioned would have been interested in these bonds at its own risk, or by lending to officers and directors on the security of the bonds, without openly indorsing them, unless the use of its name as the depositary of the mining company may be regarded as an indorsement.

CHAPTER XI

THE SALE OF SPECULATIVE SECURITIES

If the securities of a new corporation cannot be sold to the banker for resale to the investor they must be sold direct to the speculative public. The most conspicuous illustration of the methods successfully employed to provide large sums of money within a short time by selling stocks and bonds of doubtful investment quality to the general public is furnished by the sale of industrial securities from 1898 to 1902. We have already considered the circumstances under which the so-called trusts were promoted and have examined into their organization and the advantages which their promoters claim for them. Chief among these advantages was the restriction of competition out of which it was expected that large profits would be earned.

In the formation of these consolidations a large amount of cash had to be provided for the purchase of properties whose owners would not accept stock in the consolidation and for working capital. This cash, moreover, had to be produced within a short time and it became necessary to dispose of several billions of dollars par value of stocks and bonds and its provision was essential to the launching of the new companies. In nearly every case, arrangements were made with banking houses who organized underwriting syndicates which guaranteed the sale of these issues of industrial stocks and bonds at prices sufficiently below the price which they expected would be realized, to leave them a large profit. These underwriting syndicates did not expect to be permanently interested in the new enterprise and had large blocks to dis-

pose of. The promoters, whether individuals or syndicates, had large quantities of securities for sale. The owners of the companies which entered the consolidations had also large amounts of securities to sell, especially common stock. These owners were usually obliged to wait before offering their stock for sale until the syndicate manager had disposed of his holdings, or until the syndicate had been dissolved. As soon as their contracts with the syndicate manager permitted, a large amount of the stock issued for the stock of the constituent companies was offered for sale. It was, in short, necessary that several billions of dollars par value of industrial stocks should be sold within a comparatively short time. An examination of the stocks of the industrial trusts was sufficient to convince any intelligent investigator that at the time of their issue they were not entitled to rank as investments. In an editorial under date of August 15, 1900, the *Wall Street Journal* submits a list of questions from the answers to which the buyers of securities may form an opinion as to the investment standing of the trust stocks. The substance of these questions is as follows:

1. What were the plants able to earn on the average for the five years preceding the combination?
2. What would this amount have paid on the present amount of stock?
3. How much have expenses been reduced by consolidation?
4. How much have gross earnings been increased by consolidation?
5. What will the combination have to earn net in order to pay seven per cent on its preferred stock?
6. How much in excess of that amount is the company earning now?
7. What is the amount of the net floating debt?
8. How is this floating debt secured?
9. Is the corporation hampered by burdensome contracts?
10. Can it enforce its own contracts with buyers?
11. What is the extent of the competition encountered?

12. What is the possibility of reducing operating expenses?

13. Is the management in every way competent and satisfactory?

Here is presented an outline for an investment judgment. If these questions can be fully answered, the investor can determine with some accuracy whether the trust stocks can be safely purchased. If the trust has a large annual surplus of profits over its dividends, declared or reserved; if its unsecured debt is kept within manageable limits; if the reports of its physical condition, its earnings, its assets and liabilities are frequent and circumstantial, and if it has maintained by wise and energetic management a dominant position in the trade, the investor may safely put his money into its stocks. His security would not be as good as the security which a general mortgage bond would give him, but he would receive a higher return, probably 5½ or 6 per cent, and by carefully watching his investment, he would be tolerably safe against loss. If the syndicate manager would give the information asked for, and if the condition of the new corporation was shown to be satisfactory, an investment demand would spring up for its stocks.

But all of these questions could not, in the nature of the case, be answered. The trust had just come into being. If the promoter had been frank with the public, the net earnings of the plants for the preceding three years were given in his prospectus. It may appear that the amount of preferred stock issued is warranted by the net earnings, and this, be it noted to the credit of the promoters, had been usually true of their preferred stock issues. But this fact only answers two out of thirteen questions on which the investor must have information before making a conservative judgment. The remaining eleven could not be answered for perhaps five years, or until the trust, in a period of industrial depression, had proved the strength of its organization and the skill of its management. The trust, at the time its stocks are offered for sale, had no expenses to reduce; it had not attempted to increase its earnings; if it had a floating

debt, this was composed of the unsecured debts of underlying companies—not usually published—in the new company there had been no occasion to incur debts; the value of its contracts and its power over buyers were to be determined by future experience; the strength of the competition was uncertain, and the quality of its management under these new conditions had not been determined. The prospective investor was left in the dark concerning these matters. There were great speculative possibilities in the trust proposition, but he could not make an investment judgment as to the probability of their realization.

The investor, moreover, when he looked into the merits of the trust stocks, was confronted with many doubts and fears. What would be the attitude of the public toward the trust? Would its management be left unhampered to work out the possibilities of reduced expenses and more stable prices, or would the cry of monopoly be raised and popular sentiment take hostile form in special taxes, reduced tariffs, or assaults upon the corporation's right to exist? Would the public pay higher prices, or would they purchase cheaper substitutes? Had not the corporation, in issuing cumulative preferred stock, endangered its future by the compelling necessity of paying dividends on the preferred in order to protect the common? These were some of the considerations, in addition to the lack of most of the information on which he had been accustomed to base his judgment, which warned the conservative investor not to buy the trust stocks.

Even the preferred stock, based, as its value was supposed to be, on past earning power was not assured of dividends in the future. A new management had been placed in control, and this past earning power might not be sustained. Bonds or floating debt might be placed ahead of the preferred stock to absorb the earnings which were to go to that security. The cumulative feature, for which so much has been claimed, might prove a source of weakness rather than strength. If unpaid dividends should accumulate, the value of the common stock might be obliterated, and this might seriously

damage the financial standing of the company. It might even, at a critical moment, deprive the corporation of a loan which would save it from bankruptcy. As for the common stock, burdened as it was by the extraordinary advantages which are given to the senior security, it had nothing to commend it. If the investor could not safely invest in the preferred shares, he would certainly have nothing to do with the common.

The syndicate manager could not count upon selling his stocks to the investor who buys only on the satisfaction of an intelligent judgment, either his own judgment or that of his broker or banker, that the stocks into which he puts his money will yield a certain and stable return, and above all, that he can be certain of selling the stock for the price at which it was purchased. No such claims could properly be made for the trust stocks. Their dividends were uncertain, prospective, problematical. They started with bright prospects, it is true, but these prospects might never be realized. The conservative investor would have none of them.

Cut off from recourse to the investment demand, the syndicate manager made his appeal to the speculators. They are usually persons of moderate means who are willing to buy the shares of new companies at low prices, trusting in the representations of those who have stocks to sell, that these stocks will pay large dividends and eventually increase in value. The speculative buyer has usually no knowledge of finance. He does not understand the nature of an investment judgment. He thinks of a stock as $100 and regards its dividends as certain and permanent. He has no skill in offsetting advantages with disadvantages. With him a security is either good or bad. There is no halfway point. If the syndicate manager had set before him all the materials for an investment judgment of the trust proposition, he could not have made such a judgment. If, moreover, the difficulties and uncertainties which deter the investor from buying trust stocks had been presented to the speculative buyer, he would have been frightened away. If these negative considerations

are not presented, however, he will not ask for them nor will he suspect their existence. Great care must therefore be taken to give him only the most simple and favorable information concerning the stock which it is designed that he should buy. The "public" asks few questions—save as to the standing of the officers and directors of the new company, for they naturally do not want to be robbed—and the amount of dividends which is promised to its stockholders. It is from this class of buyers that a portion of the funds which are to reimburse the advances of the underwriter are to come.

There is, it is true, another method which might be suggested in such cases, and which, if successful, would have enabled the trust stocks to be originally sold to the investor. The promoters and underwriters might have held their stock, foregoing their profits for three or five years, and might require the vendors to do the same. At the end of this period, if the calculations of the promoters to which the underwriter had fixed his indorsement proved to have been accurate, the securities which had been held off the market pending this verification could have been sold to the investor at good prices. The corporation law of Germany, as we have seen, attempts to secure this confirmatory delay by prohibiting the listing of shares on the exchanges until one year from the date of the organization of the company. A longer time was needed to establish a new form of industrial, such as the trust, in the confidence of the investor.

This delay, however, although desirable from the standpoint of conservative investment judgment, is not contemplated by financiers of new companies. Not only would it be unreasonable to demand of them such a degree of self-denial, but the enforcement of such a regulation, it is safe to say, would make impossible the financing of speculative projects on a large scale. The underwriter would demand a prohibitive commission, and the promoter would have little inducement to bring forward large projects, if both interests were obliged to wait for several years before selling their stocks. To require such a delay, moreover, would be to

destroy the function of the underwriter as the retailer of speculative securities from the promoter to the public. It would compel the underwriter, if he put his money into any project, to regard it as a permanent investment; that is to say, to abandon his character of banker, and assume that of investor, whose profits, at least for several years, must come from interest or dividends. As an investor, however, the underwriter would demand the information necessary to an investment judgment, and this information the promoter of a new form of enterprise such as the trust, is usually unable to furnish.

We are brought, therefore, to the conclusion that the financing which was necessary in the formation of the industrial trusts could not have been secured if those who furnished the cash had been required to realize their profits from selling the securities which they received to the investor who demands the conviction of safety before parting with his money. Or, to put the matter in another way, underwriters, as prudent men would not put their money into the stocks of the industrials without a reasonable certainty that these funds could be recovered with a profit in addition by selling the stocks to the general public. In short, the underwriter of speculative stocks or bonds asks the public to buy stocks for investment which he would not buy for himself. Only in this way can money be raised for new and risky projects.

The main recourse of the syndicate manager of the trust was to the speculator, and he was fortunate that he could draw upon a reservoir of funds which was full to overflowing. The methods by which he exchanged his trust stocks for cash we have now to consider.

The first step in the process of selling stock to a speculative buyer is to excite his imagination. There must be placed before him a picture of enormous wealth in which he is invited to share. In actual existence as yet there is nothing save a flat plain, a precipitous mountain, or a prospect of monopoly profits. The speculator must furnish the money to ascertain what lies below the surface, and if there is any-

thing found, to develop it. But in order that the speculator shall advance these funds, he must be made to disregard the present and project his gaze into the future. He must behold, as does one in a vision, a fully equipped mining property or oil well, and he must see himself as part owner of this valuable property. In view of this necessity, the general arrangement of a prospectus, no matter of what enterprise it treats, is always the same. The project contains some new feature —a new resource, a new invention, a new form of industrial organization, oil lands in California, copper land in Arizona, real estate on the frontier of Brooklyn, or options on competing plants. The development of these resources and opportunities is to be followed by large earnings.

The reasons for this belief are forcibly set forth in a prospectus. The mine is either directly adjoining a fully developed property which is paying large dividends, or the geological indications point unmistakably to the existence of a resource of great value. Similar enterprises in other parts of the country have proved enormously profitable. The present scheme is fundamentally identical with these enterprises. Therefore, the present scheme will be equally successful.

A mass of expert testimony of this or that "professor," whose wealth of technical detail is most convincing, is usually added. Note, for example, the following extract from an expert's opinion of the Monterey district: ". . . The geological formation of the oil-bearing strata and extensive surface indications of petroleum seem to indicate the certainty of there being productive resources of oil below. Sandstone and shale of a bituminous character seem to be the general surface indications of petroleum. There are apparently three anticlinal ridges extending through this range which the oil belts seem to follow. Judging from the croppings, the west side of the Salinas Valley contains a vast oil reservoir. I have formed this conclusion on account of the immense depth and thickness of the oil-bearing sands and also the immense beds of bituminous shale." Perhaps the "professor" has a record of success to enforce his statements. He may "stake

his reputation" on the success of this last project which he indorses, and which he believes to be "far richer than United Verde," a mine which paid $2,924,000 in dividends in one year.

Accompanying the expert's reports will be maps and charts showing the exact location of the property, if the proposition is for a mining or oil enterprise, in relation to producing mines or wells, these latter being always in the immediate neighborhood of the land of the new company or else "the geological formation on this claim is identical with that found on the largest dividend paying properties in the districts." The National and State Geographical Surveys are dragged in to support the expert testimony.

Newspaper accounts of the "fabulous richness of the Kootenay country," or "Wonderful Tonopah, a Desert Camp of Fabulous Richness," written for local newspapers, or the more sober narratives of the metropolitan journals, also excite the imagination of the speculator. Such news items as the following appear in metropolitan journals: "Nevada, January 27th—At the Tonopah camp the most impressive things are the huge stacks of ore awaiting shipment. Henry Cutting, who came into the camp early last year with only $2.50 in his pocket, has one stack which is estimated to be worth $500,000. Another man who has been very lucky is Frank Golden, who has a great stack of sacks of ore like a fort, which is worth $700,000."

Strongly worded testimonials may be added to the schedule of evidence. The project is backed by substantial business men, often by men of national reputation—won in some other field—who publicly advise their friends, as did an ex-governor of a Western State, to "provide for the children" by investing a few dollars in rubber certificates. The best of bank references are also given.

All this mass of skillfully arranged data leading the mind almost imperceptibly from the known to the unknown, emphasizing advantages to the point of exaggeration, glossing over difficulties or preferably remaining silent about them,

marshaling history, science, and reputation to the support of prophecy—all these specious and forceful arguments are directed to the end of creating in the mind of the prospective buyer a vision of enormous wealth. It is but seldom that they fail to accomplish the result. If it were possible, a sympathetic examination of their literature would deceive the very elect.

Cupidity is the next passion to which the promoter appeals. The stock in these companies whose prospects of large profits are so well assured, is offered at a low price, 50 cents, $1 or $2.50, per share, some indeed as low as five cents a share. The company issuing the stock, it is stated, is in possession of a resource of enormous value. Only a small amount of money is needed to develop the mine or drill the well—" in order to facilitate the development of the valuable lands of this company, the directors have placed on the market a limited amount of its treasury stock to be sold at the special introductory price of twenty cents per share, and the company reserves"—mark this, opportunity only knocks once—" the right to advance the price of the same without notice." After the initial expenditure, it is claimed, the enterprise will grow out of its own earnings.

And its assured dividends. "Marvelous and monstrous" is the only phrase that adequately describes them. It is a poor company that cannot assure the investor twenty per cent on his money. Note, for example, the following: "The value of this stock as an investment may readily be seen when it is understood that one well producing 100 barrels of oil daily will earn four per cent on the entire capitalization, or twenty per cent on the present selling price of the stock." The company in question had room for 150 wells on its property and the inference of the prospectus is that dividends of 1,000 per cent on the investment are by no means out of the question.

If the speculator asks for conclusive evidence that these huge dividends will be paid—let him look to the record of other enterprises which had at the outset no better prospects

than that into which he is asked to put his money. "In one instance, about one and one half years ago, $1,200 was invested in three sections of oil land in one oil district. To-day these same lands are worth $5,000,000. In another instance $3,200 was invested in two sections. To-day these two sections are worth $6,000,000." Specimen advances in oil stocks are given—for example: "The New York Oil Company sold at fifty cents per share, present market price $200"; or "the Home Oil Company sold at $10 per share, present market price $5,000." Or, if the proposition is in gold or copper mining, figures like this are given: "United Verde once sold for fifty cents a share and is now paying nearly 8,700 per cent on that price. The LeRoi Mine was sold entire in 1890 for $12.50; it now has a market value of $10,-000,000—$100 invested in LeRoi a few years ago is now worth $250,000 and has paid $35,000 in dividends. Alaska Treadwell has paid $5,000,000 in dividends and its stock has advanced 3,200 per cent," etc., etc. Evidence of this character is abundant and effective.

If doubt is expressed as to the future demand for these products even should they be successfully produced, the prospectus is ready with assurance that "the development of California will demand all the oil that can be produced" or "the electrical industry will continue to exhaust the supply of copper." Nothing is left uncovered. Every detail is attended to. A chance to draw a valuable prize is offered at a low price.

The whole argument is summed up with convincing brevity by a copper prospectus. "Bell telephone was given away for board bills, yet has paid over $36,000,000 in dividends. Calumet and Heckla went begging not so many years ago; its total dividends to date are over $60,000,000. It would take a day to enumerate the instances where properties rich and great to-day were offered for a song. The people who did buy them are rich now, and why? Not because they were 'lucky,' but because they investigated promptly, judged the merit of the proposition, and acted

while there was time. If they had waited until to-day to buy the shares of these enterprises they would get perhaps five per cent on their money, possibly eight, but no more. But buying when they did, they got all the way from fifty per cent up to 500 per cent because they had both the judgment to recognize the worth of the opportunity and the courage to seize it. A thorough examination of the details of the Arizona Copper Syndicate will satisfy any man of judgment as to its merits. It is one of the greatest opportunities ever given investors. Investigate it now while the price is low."

Here are the principal inducements offered to the speculator in every new enterprise. Other men have made money in similar enterprises. Why should not he be equally fortunate? He is not asked to gamble, but merely to investigate an industrial opportunity and act as his judgment directs. He is carried away by the prevailing optimism of the time, and he is ready to listen to the advocates of new schemes for getting rich. Other people are making money fast, and he is certain of his ability to do as well as they. The appeal to his "judgment" and his "courage" is the bit of flattery which is often decisive, and the final outcome is that the man of small means invests $100, $200, or $5,000 in the stock of a new company in the confident expectation that from this small investment he will one day reap a fortune.

When once embarked on a doubtful enterprise, the speculator is impelled by sentiment and interest to draw others along with him. The speculator is by instinct a promoter. He is zealous in advocacy of this project to which he has committed his money. He urges upon his friends the merits of the new scheme. His enthusiasm is infectious. Others are drawn into the net by his representations, and they in turn compass sea and land to make one proselyte. In this way the wave of speculation is set going and sweeps through all classes of society, turning the accumulations of years of effort into the treasuries of the new companies.

The situation is universally familiar. A minister or a physician has a few thousands laid by; a woman has either saved or inherited a small amount; a workman or a farmer has managed to scrape together something for a rainy day. Such people are found by the thousands in every part of the country. From their accumulations they draw a small rate of return, often so small that they are constrained to add it to the principal and do not venture to apply it to expenditures. Four or five per cent clear gain is about all that can be expected. Their lives are hard, monotonous, and barren. Before their eyes is constantly flaunted the luxurious extravagance of the wealthy leisure class. To such people the prospectus of a new enterprise is wonderfully attractive. In exchange for a few thousand it offers them a fortune. The offer dazzles them. Their desires benumb their judgment. The risk of the undertaking is forgotten. Few of those who put their money into a speculative scheme enter it with the thought of risk. The calm balancing of chances is the exercise of a superior order of mind. The speculator does not buy a chance, he buys what he thinks is a fortune. He has had a vision of a vein of ore or a great reservoir of oil. He has seen a populous town arise around the factory in which he has invested. He has forsaken the difficult paths of reason for the flowery fields of imagination and conjecture.

The line of speculators is very ancient. In 1720 there was printed for W. Bonham, in London, "an argument proving that the South Sea Company is able to make a dividend of thirty-eight per cent for twelve years, fitted to the meanest capacities." This was one of the first prospectuses ever issued, and the succession has been worthy of its ancestor; Spanish Jackass Company, Louisiana Bubble, South American Bonds, American Improvement Bonds, English Railways, American Railways, American Mines, South American Railways, Australian Railways, Band Mines, American Industrials—John Law, Hudson, Barnato, Hooley, Gates, and Lawson. The line runs true. The Jackass Company still lives.

The foregoing presents in brief outline the methods of selling stock in an enterprise which is, on its face, so dangerously risky as to require the most spectacular representations and the most flamboyant promises in order to work the speculator up to the point of shutting his eyes to the risk and going in on faith alone. Hundreds of these companies are floated every year, and their promoters often find good markets for their wares. Most of these promoters are honest. They expect to spend a large part of the funds intrusted to their care in the exploitation of the resource or opportunity which they control. A minority are fraudulent. But, one and all, they must, in order to float their schemes, appeal to the imagination and the cupidity, and blindfold the judgment of the people who buy their shares. All that they can properly offer is a chance in a lottery in which there are few prizes and many blanks.

CHAPTER XII

THE CAPITALIZATION OF CORPORATIONS

THE capitalization of a company is the face or par value of its stocks and bonds. The theory of the law is that the capital liabilities of a company equal the contributions by stockholders and creditors.

The considerations of practical expediency which determine the amount of preferred and common stocks and bonds in the original plan of capitalization have been previously considered. We are here concerned with the relation of capitalization to the public welfare. There is a general belief that many of the most serious evils of our economic life are traceable to the excessive capitalization of corporations, and that some plan should be devised by which the evil of overcapitalization may be eliminated. Senate Bill No. 2941, introduced July 5, 1911, by Senator Newlands of Nevada, aimed to provide for the registration under federal authority of corporations engaged in interstate commerce, gives, in Section 10, a definition of overcapitalization as follows:

> The Commission . . . may revoke the registration of any such corporation upon the ground of overcapitalization; that is to say upon the ground that the par value of the total securities, including shares of stock and all obligations running for a term of —— years or more, of such corporations, issued and outstanding at any time clearly exceeds the true value of the property of the corporation at that time. In determining such true value the said Commission shall consider the original cost of such property, its present replacement cost, its present market value, including the good will of the corporation's business, and the fair value of the services rendered in the organization of such corporation . . .

This definition is that currently accepted. If the face or par value of the shares of stock and the bonds issued by a corporation exceed the fair value of its property, including good will, patents, franchises, and other forms of intangible wealth, that corporation is said to be overcapitalized.

Various methods are available for determining this fair value. If we look on a corporation as a going concern, operated for profit, its value can be expressed as a certain number of years' purchase of its average profits. If, for example, a company earns an amount of $50,000 a year for five years, and if it is operating in a business of a temporary or extra hazardous character, such as the exploitation of a patent or a publishing business, it may not be worth more than two or three years' purchases of its profits, $100,000 to $150,000. A railroad company, on the other hand, with the same profits, might sell for twenty years' purchase, or $1,000,000.

Corporations are seldom sold for cash. The usual method of disposing of them is to sell their stock, both their assets and the debts secured by those assets being taken over by the purchaser. The current or market measure of the value of a corporation is, therefore, the amount for which its stock can be sold. If its bonds are worth par, and its stock is sold for one half of its par value, or $50 a share, then assuming that the capital is equally divided between stock and bonds, the company is twenty-five per cent overcapitalized. Its capitalization is $2,000,000, let us say, but the selling value of the evidences of debt and shares of stock, the tokens and symbols of its capitalization, is only $1,500,000. On the other hand, a condition of undercapitalization would be revealed by a price of $200 for the stock. A par value of $2,000,000 would, in this event, be worth $3,000,000, an undercapitalization of 50 per cent. If we accept this standard of capitalization, the use of the terms "over" and "under" implies that a company is only "properly" capitalized when the par value of its securities outstanding equals their market value.

An acceptance of this definition compels us to go further and approve the practice known as "stock watering" or more

euphoniously "the capitalization of earnings." A company pays twenty-four per cent on its stock. As a result of these large dividends the stock sells at a high premium, say $350 a share on a par of $100. This company is "undercapitalized." That its stock capital may be reduced to a "proper" basis, the number of shares must be raised from 10,000, on which twenty-four per cent is paid, to 40,000 on which the dividend will be six per cent, and which, if the business is reasonably secure, may be expected to sell around par, a "proper" capitalization. If, therefore, we attempt to limit the capitalization of corporations to the "fair" value of their business, and accept the standard of selling value or market price to determine that value, we might indeed prevent many extravagant and outrageous abuses of capitalization, a result which would be most desirable, but we should, at the same time, sanction the practice of stock watering, the multiplication of shares of stock as earnings and profits increase.

The treatment of stock watering as a method of distributing the accumulated surplus of a corporation is reserved for a later chapter. At this point, I wish to consider briefly the alleged necessity of strict regulation of the capitalization of corporations in the interest of the public welfare. It has been often charged that the increase of capital without the addition of new funds is opposed to the interests of the community for the following reasons:

(1) The corporation is obliged to pay dividends on this extra, or "watered" stock, which results in higher prices of product to the public than the prices which would suffice to pay dividends on an "honest" capitalization.

(2) The payment of dividends on a capital larger than the cost of duplicating the corporation's equipment is an inducement to competition, which results in an unnecessary duplication of railroads and mills.

(3) The issue of securities for which no cash equivalent has been received, often results in the sale of large amounts of worthless stocks and bonds to the uninstructed public.

These arguments refer to matters of great importance and merit a careful consideration.

Every business concern, no matter on what basis it has been capitalized, fixes its prices at the point of largest return. A corporation is not in business for the benefit of its customers, but for its own benefit. Its prices are not graduated according to what the buyer would prefer to pay, but are based upon what he can be made to pay. If a corporation has a monopoly of a particular line, it will fix its price at the point of maximum net return, i.e., at that point where, account being taken of the larger consumption at low prices and the decreased cost of production with large output, and, on the other hand, of the decreased cost of distributing a smaller output, the net return on the sale will be the largest. If the corporation has competitors, its prices will be influenced by the quotations of its rivals. In no case will lower prices be charged than the self-interest of the seller directs.

The fallacy that the natural tendency of business men is to charge a "proper price" has dominated the argument against railway corporations. They have been charged with maintaining exorbitant rates in order to pay dividends on watered stock although they have always, in so far as public opinion would allow them, determined their charges by the exigencies of competition, and by the principle of charging what the traffic will bear. The pressure for dividends has sometimes influenced a board of directors to take undue advantage of a temporary opportunity to exact high prices or high rates; but if prices or rates were higher than the traffic would bear, the effect of such extortion was to reduce the profits of the corporation below the figure at which wise management would have placed them. Railroad corporations have sometimes been able to prevent a reduction of rates by railroad commissions, by making it appear that the proposed schedules of rates would render impossible the payment of interest or dividends on issues of bonds or stocks which bore no reference to the capital invested in the road, but which were looked upon by the courts as constituting a vested in-

terest in the hands of innocent holders whose rights must be protected.

But although the watering of stocks and bonds may thus have been made, at times, a means of securing a corporation in the revenues of monopoly, by interposing an innocent third party, the investor, between the corporation and the public power; from the company's standpoint, it has nothing to do with fixing the schedule of charges upon which the revenues depend. The number of pieces of paper representing the ownership of a steel corporation, and which entitle their holders to share pro rata in any disbursements of profits which the directors may make, has no more to do with the price of steel rails or steel billets than the number of persons among whom those pieces of paper may be divided. The price of oil was no lower when the stock of the Standard Oil Company of New Jersey sold at 800, and the price of steel rails was no higher when the common stock of the United States Steel Corporation of New Jersey sold at 12. Both steel and oil are sold for the prices which will produce the maximum profit, and there is no more reason why that price should advance because the capital is increased than that the capital should decrease because the price is reduced. The corporation is a unit, an association, managed as a single business, without reference to the amount of its nominal capital or the number of its owners. The clamor for dividends may drain the corporation of its substance by reducing its surplus, but it cannot permanently influence dealings with its customers.

The claim that the existence of watered stock stimulates competition has stronger authority to support it. Thus the Wall Street Journal says:

> Any plant which is overcapitalized and which pays dividends on overcapitalization, invites competition by announcing that a competitor capitalizing his plant at its true value can earn dividends. If there is overcapitalization, there is certain to be competition. . . . It is an economic law that profits in any line of business will not continue to exceed a fair return on the capital invested in the plant.

In other words, it is claimed that the competitors of the United States Steel Corporation, for example, are encouraged to press forward, by the belief that the sum of the figures set out on the faces of the shares and bonds of that company represents an amount in excess of its investment value.

Within limits, this opinion is well founded. An excessive capitalization on which dividends are being paid is certainly a protection to outside companies. Upon this subject, some remarks of the Iron Age on the occasion of the formation of the Steel Trust are of interest:

> Probably none have greater occasion to rejoice at the turn which affairs have taken than the outside interests. The majority of the latter express themselves as well pleased with the formation of the great consolidation. Above all, they hold that a less aggressive policy will be pursued than has characterized some of the constituent interests, and that they will be gainers from the greater steadiness which is sure to characterize the markets. They frankly admit, too, that they see increased safety to their own interests in the fact that the corporation must provide for large fixed charges and will probably make efforts to earn a good return on that part of their capital which they pronounce "water." That means that living prices must be maintained—prices which will give them an opportunity to make a profit on their own investments.

In other words, the large capital of the Steel Trust would, in the opinion of its competitors, influence its managers to a more pacific and conciliatory policy than that formerly pursued, for example, by the Carnegie Company, and would render them less ready to resent outside invasion of their territory. The policy of the corporation shows that this expectation was well founded, and has probably influenced the competitors of the steel corporation to increase their productive capacity more rapidly than they would otherwise have done.

Indications have not been lacking of more sinister influences of overcapitalization. In an endeavor to market their stock, the interests temporarily in control of certain

corporations have marked up prices to exorbitant figures, and have given large encouragement to competitors. Charges have also been made that many plants have been built for the sole purpose of selling them out to some company which was endeavoring to retain control of a particular industry. These two variants from established business practice may perhaps be cited as further evidence that overcapitalization stimulates competition.

But while so much may be conceded to the theory that overcapitalization stimulates competition, on the general proposition, denial must be made. A man engages in a business because he sees an opportunity to make a profit by producing or buying commodities at one price, and selling them at a higher price. He does not look to the capitalization or the dividends of his competitors when forming a final judgment as to the profit of an enterprise. Large dividends on large capital may call his attention to the profits of an industry, but the factors determining a change in his investment are the conditions of the industry and the prospects of the market.

A group of men proposing to engage in the manufacture of steel rails, for example, would take into account the following factors: (1) The supply of raw material; (2) the labor and superintending force; (3) the transportation facilities; and (4) the prospective demand for steel rails. They would next turn their attention to the position of the manufacturers already in the field, and here the capitalization of competitors would be considered. But the main considerations which enter into any scheme for building competing plants—are the factors affecting the cost of production and the demand for the product. The dividends of competitors are not to be relied on as a guide to profits. They may be concealed or exaggerated. The foundation of conservative judgment consists of the known facts of the industry.

The third objection to the method of capitalizing a corporation on the basis of value instead of investment or cost of replacement, is founded on the claim that such capitalization leads to the issue of large amounts of worthless securities.

We may admit that the method of capitalizing earnings generally employed in the United States has often resulted in deluging the speculative public with the stocks and bonds of new enterprises whose prospective earnings are seldom realized. The evils resulting from these practices are generally deplored. It must be admitted also, that the enforcement of a law which would limit the issue of capital to the amount actually invested in an enterprise, would have the effect of banishing from the stock exchanges the low-priced, speculative securities whose number is a standing reproach to our financial methods.

Suppose, for example, that the original capital of the United States Steel Corporation had been limited to the amount of money which represented the value of the various properties of that corporation, and which has been estimated by the Commissioner of Corporations at $630,000,000. Suppose, now, that the capital had been divided into $315,000,000 of seven per cent cumulative preferred stock and $315,000,000 of common stock. After such a readjustment, the value of the preferred stock would be considered safe and it would probably sell around 130. The common stock would, on this basis of capitalization, show average earnings of more than $100,000,000, out of which a 20 per cent dividend could safely be paid out of the profits of the current year. Under these circumstances, on the basis of those industrial stocks which represent a conservative capitalization, United States Steel common would sell around 300. The effect of enforcing upon the promoters of companies such a rule as the one suggested would be to place the securities of these companies, if their management were only ordinarily successful, upon an investment basis. Such a result, few will deny, would be desirable.

The expediency of instituting such a drastic change in corporation regulations, however, may be seriously questioned. In point of security, Standard Oil at 800 was not as safe as Pennsylvania at 130. During the second six months of 1908, for example, the price of the former fell from 710 to 449, not

as a result of any lack of confidence in the company, but because of the limited floating supply of the stock, and the narrow restriction of its holdings. Pennsylvania stock, on the other hand, equally secure in its earnings, fluctuated only $7\frac{1}{8}$ points during the same period. It is, to repeat, a question whether any great benefit is gained by so limiting capitalization as to make shares of stock sell at 600 per cent premium. Nothing is gained in security. The investment interest in the company, owing to the high price of shares, is likely to be less widely distributed, and the fluctuations in value of these high-priced stocks are sudden and of great extent.

It is in the field of public service corporations, railroads, street railroads, gas and water companies, that the alleged evils of overcapitalization are most serious. We hear much of the watered stock of our railroads, of the capital tax of our municipal monopolies. The organs and instructors of the public have labored diligently to fix in the minds of the voters the firm conviction that the overcapitalization of a public service corporation results in a tax upon the patrons of the monopoly to pay interest and dividends on the watered capital. Even if the advocates of this view admit that a railroad or a street railroad company, no matter what its capitalization, will make all they can out of their business, and will only regard their debt or the number of shares of their capital stock when they come to divide their gains, the critics of overcapitalization will still contend that by multiplying bonds and stocks, these companies are able to conceal their earnings, to keep the public in ignorance of what they are making, and in this way to safeguard their ill-gotten gains.

This opinion is erroneous. It is true that in many instances the stock or bonds of a company have been increased in order to keep a more or less supposititious "public" in ignorance of its real earnings; or to invoke the aid of the law against proposed reductions of rates of charge, on the ground, already mentioned, that the enforcement of the new tariffs

would result in injury to the innocent investor. This has been particularly true of street railway and gas companies, where a uniform charge invites a reduction of rates by act of the legislature. This is, at best, however, a recourse of doubtful value. If, in the opinion of the court, the public policy demands a reduction of charges, the chances are that the bondholder will have to take the consequences.

A holder of stock in the American Sugar Refining Company could not successfully plead his "vested interest" in opposition to a proposal to remove the differential on refined sugar; nor could a holder of People's Gas or Interborough Company, have much hope of success in a plea against a reduction of his dividends by some act of the municipal legislature. As a rule, the public policy will prevail with the court, and while care will always be taken to allow a fair return to capital, and while the court will be especially careful not to force a company into bankruptcy by approving a reduction in rates which would make the payment of interest impossible, if it came to an issue between public interest and private property, the latter must give way. Although such appeals for the protection of vested interests have been successfully made, no well-informed investor would pay for the bonds—for example, of a gas company, where the charges were threatened with a reduction by act of the legislature—a price which would express his conviction that a court would be influenced by some such argument as that described, to declare the reduction unconstitutional. Stock watering is no reliable defense against legislative attack.

The question of the reasonableness of rates, from the point of view of the investor's interest, has been frequently raised in suits brought to restrain the reduction of rates by railroad commissions. The United States Supreme Court, while admitting that the investor's rights should be considered, has gone on record as upholding the interests of the public to be paramount to any other interest. The most forcible expression of this view is contained in the opinion in the Nebraska Maximum Freight Rate case:

> The rights of the public, said the court, would be ignored, if rates for the transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public, or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay the interest on its obligations, and declare a dividend to stockholders.

The principles underlying the regulation of the rates and prices of Public Service Corporations have been finally settled by a line of decisions in the Federal courts. These companies are entitled, irrespective of the amount of their debt or the number of shares into which their capital stock may be divided to a "reasonable return" on the "fair value" of their property. The leading recent case which illustrates and confirms this principle is that of William R. Willcox, *et al,* constituting the Public Service Commission, etc., of New York, *vs.* The Consolidated Gas Company of New York. This case was decided by the United States Supreme Court on January 4, 1909.

The New York legislature and the Gas Commission of New York had ordered that after May 1, 1906, eighty cents per thousand feet should be the maximum price charged for gas in New York City. The Consolidated Gas Company had resisted the order, and had obtained from the United States Circuit Court for the Southern District of New York, an injunction restraining the defendants, who had succeeded to the Gas Commission, from enforcing the provisions of the act on the ground that the eighty cent rate would not yield the Consolidated Gas Company a fair return on the value of its property, and that the act establishing that rate was, therefore, in violation of the Federal constitution. It was not contended that the new rate would reduce the company's dividend rate, but the objection was that the "net income" would be reduced below what was "reasonable." The method employed by the Master in Chancery, to whom the case was referred for ascertaining the "fair value" of the property of

the Consolidated Gas Company, was to find the cost of reproducing its physical plant $47,000,000, and to add to this sum $12,000,000 as the value of its franchises, its right to do business in New York City. This value of franchises was arrived at by adding to $7,781,000, which the defendant corporation had paid for these franchises in 1884, the same proportionate increase that the value of the tangible property in 1905 showed over the value in 1884.

The Supreme Court rejected this method of valuation. It accepted the original franchise value of $7,781,000 since the Consolidated Gas Company had taken them over at that figure. It accepted also the value of $47,000,000 for the tangible assets which had been taken by the lower court. The Supreme Court, however, rejected the increase in franchise value as entitled to any consideration, taking the position that the increase in the value of the franchise was due to the high rates which had been charged, and that the Company had no right to presume that it would be left free to charge these rates in the future. The Supreme Court has declared that the property of a corporation on which it is entitled to charge rates which will yield it a reasonable return, includes its physical property at the reproduction value, plus any franchises which it may have purchased. It is impossible, in the light of this decision, for a stockholder to set up the plea of vested interest against a reduction of the rates charged by the company in which he has purchased stock. All that the investor can be assured of is a reasonable return on the "fair value" of the property which his company owns. The Supreme Court, in the same decision, has established a fair rate of return on the property of the Consolidated Gas Company. Owing to the security of earnings offered by this monopoly, this "fair rate" was declared to be six per cent. Applying the six per cent rate to the ascertained value of the "tangible property" in which the Supreme Court made a slight reduction, and allowing for the increased consumption due to the lower price of gas, the eighty cent rate, it was found, would yield a net revenue of at least six per cent on the fair value of the property.

In the Minnesota Rate Cases, the Circuit Court accepted the cost of reproduction as the method of determining the fair value of the property, and applied to this a seven per cent rate as that to which an investor in the railway business —more hazardous than the business of supplying gas in a large city—was properly entitled.

In neither case were the rights of the stockholders to receive a given rate of dividends on their stock regarded by the court. The stockholder has no right to dividends which can be pleaded against the public interest. The corporation, as distinct from its creditors and stockholders, has a right to a reasonable return on the fair value of its property employed in the public service. The income which represents this reasonable return the company can divide according to its pleasure. If, for example, the fair value of a railroad company's property is $100,000,000, a reasonable return would be $7,000,000. Assuming an equal division of the capitalization between stock and bonds, and that the bonds bear four and one half per cent interest, $2,250,000 would be devoted to interest and $4,750,000 to dividends, or at the rate of 9.5 per cent on the stock. Now, the company might double its stock capital, raising it to $100,000,000 and on this it could pay 4.25 per cent, or it might cut its stock capital in two, reducing it to $25,000,000, on which the dividend would be nineteen per cent. This apportionment of the company's income would be no concern of the courts, although the Public Service Commission of a state might exercise authority over it, as in New York and Wisconsin, where issues of capital are closely restricted. All that the Federal courts are concerned to do, however, is to protect the public against exorbitant charges, to limit the income of public service corporations to what is fair and reasonable. Questions of capitalization, over or under, as the case may be, do not concern them.

We must, however, plainly recognize that public opinion will not tolerate stock watering as applied to public service corporations. The report of the Hadley Commission con-

tains the following statement of principle which, however we may individually dissent from it, we must recognize is, in fact, almost the law of the land, so firmly is it bedded in public opinion.[1]

> Scrip, bond and stock dividends should be prohibited. They are commonly justified on the theory that the company has in times past put earnings into the property which it might have divided among the stockholders, and that the scrip dividend merely reimburses the stockholders for what they have put into the road. But these sums were put in, either to make depreciation and obsolescence good, or as actual additions to the property. In the former case the capital account ought not to be increased. In the latter case any such increase gives color to the claim that the shippers have been taxed to pay for the improvement of the property, and that the stockholders have appropriated the result. . . it is far better to let the increased value be shown by a higher rate of dividends on the existing shares of stock, instead of by an addition to their nominal amount.

This conclusion, as we shall see in a subsequent chapter, is not only sound public policy, but it is sound finance. The best companies in every line have largely abandoned the practice of stock watering. It is fraught with danger to the company, and if the practice is applied to the stock of a large corporation prominently before the public, a stock or scrip dividend is likely to excite unfavorable comment. As we shall see, there are other methods, until now not subject to criticism, of favoring the stockholders in the issue of new shares of capital stock.

[1] Report of the Railroad Securities Commission, December 8, 1911, p. 29.

CHAPTER XIII

UNDERWRITING

NEARLY all public flotations require the aid of the underwriter. The underwriter, as his name implies, insures or guarantees the sale of securities within a certain time at a price sufficiently below the anticipated market price to insure a profit to the guarantor. It is a matter of indifference to the corporation whether its securities are sold outright or whether a responsible syndicate guarantees the sale. In either case, the money necessary is provided at once by the bankers, who must look to the sale of the securities which they have underwritten or purchased, for their reimbursement.

In underwriting the securities of a new company, or in purchasing them outright, the banker who undertakes the responsibility of the transaction usually associates with himself a number of other individuals and banking houses in an organization known as an underwriting or subscription syndicate. The difference between underwriting and subscription is that in underwriting the securities underwritten by the banker are offered for sale by the corporation through the banker, and in subscription, the securities are purchased by the banker and offered by him to his own customers as sound investments. In either case, the association which is formed to assist him in carrying out his contract with the corporation is substantially identical, and the two forms of syndicate underwriting and subscription can be considered together.

The underwriting syndicate is a voluntary and temporary association of individuals or firms or corporations which is

formed by a syndicate manager, usually a banking firm, to assist them in guaranteeing the sale of, or in purchasing an issue of stocks or bonds. The steps in the organization of the syndicate are as follows:

The original contract is made between the banker and the corporation, by which the banker agrees to either purchase certain securities at a price, or to guarantee their sale within a certain time, at a certain price. The corporation usually knows no one but the syndicate manager in the transaction, and looks only to him for the fulfillment of the agreement. The fact that the banker associates others with himself in the transaction, in an underwriting syndicate, is a matter of no concern to the corporation, although the members of the syndicate may be asked, with the consent of the corporation, to directly assume a share of the syndicate manager's liabilities.

While the syndicate manager may be a very strong banking firm, such as J. P. Morgan & Company; Kuhn, Loeb & Company, and may be able to guarantee the flotation of a very large issue of securities, it is usually advantageous to organize a syndicate. Most banking houses have a definite policy which regulates the amount of capital which they will allot to a particular enterprise. The house, for example, with a capital of $10,000,000 may have a rule that it will not invest more than $1,000,000 in any one undertaking, so that any losses which it may sustain by unsuccessful investments may be offset by the profits of those which have been profitable. When, therefore, this banking house makes an agreement to underwrite $10,000,000 of bonds or preferred stock, unless it departs from its established policy of dividing its risks, it must add to its capital the capital of its friends.

By admitting other bankers with wide connections and large numbers of clients to share in the profits of its subscription, a banking house obtains a broad market for the securities which it has for sale and by adopting this policy in all its undertakings it makes sure of quicker returns. The necessity of securing a broad market for bonds or stocks

is sometimes recognized in the original contract between the corporation and the bankers by a joint agreement between several banking houses so situated as to command investment funds in different parts of the country. A recent bond issue of the American Telephone Company, for example, was taken by J. P. Morgan & Company; Kuhn, Loeb & Company; Kidder, Peabody & Company, of New York, and Baring Brothers, of London. Ordinarily, the subscription would have been offered to a New England banking house, but the New England market was unable to absorb more telephone securities and a broader market was required, to obtain which the coöperation of New York and London houses was enlisted.

An Eastern house, undertaking the underwriting or purchase of bonds of a Western enterprise, associates with itself, if possible, Western bankers whose clients are likely to be familiar with the enterprise. The syndicate is organized as follows: A contract is made between the Pennsylvania Railroad Company and Speyer & Company. The head of the banking house communicates with a number of firms and individuals with whom they have coöperated in the past. If, as in the case cited, Speyer & Company have agreed to guarantee the sale of $75,000,000 of stock of the Pennsylvania Railroad Company at 120 in return for a commission of $2,250,000, they will recite these facts in their communications to those whom they wish to join in the syndicate, and they will ask each one to indicate by return mail or telegraph, the amount of participation in the syndicate, which Speyer & Company state they propose to form, which he desires. One house will ask for $1,000,000, another house for $5,000,000, another house for $500,000, and so on. Very few will decline because, to refuse to participate in a syndicate when requested by a house of the standing of Speyer & Company, may result in excluding the banker from participation in any new syndicate, and may also cost him the coöperation of Speyer & Company in his own undertakings. After the replies have all been received, the amounts are summed up and either one of two results may be disclosed. The applica-

tions for participation in the syndicate may exceed the amount of securities which have been underwritten or purchased, and they may be below the required amount. In the second place, unless the deficiency is considerable, the plans of the syndicate manager are not disarranged, since he expected to take a certain amount of participation in the syndicate himself. It may also be necessary, in case his request for applications does not meet with a cordial response, for him to assume a much larger part of the responsibility than he originally intended. For the most part, however, this contingency is guarded against by offering participations in the syndicate to such a large number of important houses and financiers as to make it unlikely that the combined subscriptions will be below the amount which the syndicate manager considers necessary. In most cases the amount will be largely oversubscribed. He may require only $75,000,000, and the sum of his applications to participate in the syndicate may be $150,000,000.

It is now necessary for the syndicate manager to allot these subscriptions. Since this is an association somewhat resembling the corporation, in which the liability of the participants is limited to the amounts of their subscriptions, it might be supposed that everyone would stand on the same footing, just as when subscriptions to the stock of a corporation are made. In this case, if the subscriptions are twice the amount necessary, each subscriber will expect to receive one half of the amount subscribed for.

With the underwriting or subscription syndicate, however, the procedure is different. This voluntary association or temporary corporation, which is in process of organization by the syndicate manager, is for his individual benefit. It is a business enterprise which he is promoting. While he requires the members of his syndicate to indicate how much of a participation they desire, he does not guarantee to give them all they ask for. He makes his allotment according to his understanding of his own advantage, and he considers nothing but his own interest, and the interest of the corpora-

tion for whose financial affairs he is temporarily responsible. He may assign one applicant 100 per cent of his application, another fifty per cent, another ten per cent, and another five per cent. No member of the syndicate is likely to be informed by the syndicate manager, although he may easily learn from members direct, how much allotment another member has received.

The principles which govern this allotment, looking at it from the standpoint of the syndicate manager, are as follows: In the first place, he wishes the flotation to be a success, and he makes his allotment with this object principally in view. A particular kind of securities will, in his judgment, find a ready market in Cleveland. He will allot the full amount of their applications to Cleveland bankers. If a flotation of a similar character has failed in Baltimore, Baltimore bankers will have to be content with a small share of their applications.

On the other hand, individual financiers who were not able to assist in marketing the bonds, or applicants for small amounts may receive only small percentages of allotment. The syndicate manager expects to be in business for many years; he wishes to participate in underwriting syndicates managed by other bankers. When he receives an application from a banker who is himself a manager of syndicates, he will give that banker what he asks for, since otherwise he might himself be cut off from some profitable participation in the future. Participations in syndicates, in other words, are allotted for the sake of securing participations in other syndicates. A banker makes his allotments to cultivate business good-will with the banks and trust companies from which he may wish to borrow money, and in every way possible to strengthen his position and influence by the disposition of the allotments which are entirely in his hands.

After the syndicate manager has decided upon the allotments, he sends to each subscriber a copy of the syndicate agreement which the subscriber signs, and opposite to his

name places the amount of his allotment. The subscriber is then bound by the conditions of the agreement, up to, but no further than the amount for which he has subscribed. Provisions usually found in underwriting agreements are as follows:

First, the subscriber agrees to take and pay for the amount of securities for which he has subscribed when called upon by the syndicate manager, and this agreement may be enforced against him in the usual manner by a suit at law.

Second, he agrees that the syndicate manager shall have entire charge of the marketing of the bonds or stock, that he may make any and all contracts and incur any expenses necessary to secure their sale, and that all these charges and expenses shall be a first claim upon the profits of the syndicate. An illustration of the large discretion given to the syndicate manager is taken from the agreement between Speyer & Company and the members of the syndicate which underwrote the $75,000,000 stock issue of the Pennsylvania. This agreement provided in part as follows:

> The managers may from time to time in their discretion purchase upon the markets shares of stock of the railroad, or rights to subscribe for stock, and in case of any such purchases the syndicate obligation shall be increased by the amount thereof, and the obligation of each subscriber shall be increased proportionately, provided, however, that the aggregate syndicate obligation shall not at any time be increased by such purchases by an amount exceeding ten per cent of the aggregate subscription price of the stock offered to the stockholders.
>
> The syndicate subscribers appoint the syndicate managers their agents and attorneys, with full power to do any and all acts expedient to perform the agreement, including the repurchase and resale from time to time for the account of the syndicate of any stock or rights which may have been sold for account of the syndicate, and generally such transactions in shares and rights as they may deem best.
>
> The syndicate is to continue in force until January

> 1, 1904, but the managers may terminate it at any time on notice.
>
> Any shares or subscription rights received by the managers may from time to time be sold at public or private sale at such prices as the managers may deem proper.
>
> In case the managers shall distribute among the subscribers any stock or rights during the existence of the syndicate, it shall be held by the respective subscribers subject to the delivery to the syndicate managers upon demand, and no subscriber shall prior to the termination of the syndicate sell or contract for the sale of any of the syndicate stock or rights.

Third, it is usually, although not invariably, agreed that the syndicate manager shall assign to the members of the syndicate a certain percentage of the profits on the transaction. The remainder, sometimes one fifth, sometimes a smaller amount, is reserved as his own profit.

Fourth, the syndicate manager also reserves the right to participate, up to the amount of his reservation for himself, as a regular member of the syndicate.

Fifth, any member of the syndicate may, at any time during its life, withdraw any of the securities at the price named in his subscription.

Sixth, it may be provided that he may assign a portion or all of his responsibility to the syndicate manager or others, and that, with the consent of the syndicate manager, he may, in this manner, be relieved of his responsibility.

Seventh, it may be provided that the members of the syndicate are to coöperate with the syndicate manager in borrowing a portion of the price of the securities underwritten or subscribed for, from banks, in which case their participation may be put in the form of a negotiable instrument so that the syndicate manager can assign it as additional security.

Eighth, the syndicate manager agrees to be responsible for good faith in the management of the syndicate, and in the distribution of profits, and for nothing else.

The terms of the underwriting agreement carry out the

idea that this is the private enterprise of the syndicate manager, which the members enter on the terms which he prescribes, and which leaves him absolute control of all the transactions necessary to carry out the purposes of the syndicate. His associates in the syndicate place the whole management in his hands. He may make or modify contracts in the interest of the syndicate; he may incur such expenses as he deems necessary; he may buy or sell the securities on the market, and he is frequently authorized to hypothecate the subscriptions of the members to provide the funds necessary for his advances to the company.

A common feature of large syndicate transactions is the organization of sub-syndicates. These differ in no essential respect from the ordinary syndicate. They are divisions of the responsibility apportioned by members of the syndicate among their own friends on much the same terms and conditions as those to which they have subscribed in the original syndicate agreement. It often happens that a man will request a larger amount of participation in a syndicate than he expects to carry, so that he may admit some of his friends to share in his expected profits, or he may become doubtful of the outcome of the syndicate, and may wish to dispose of a part or all of his responsibility to others. As a rule, the syndicate manager does not know the members of the sub-syndicate any more than the corporation knows the members of the original syndicate. The ramifications of these sub-syndicates may be very extensive. The first United States Steel Underwriting Syndicate, which involved $200,000,000, for example, it was understood, was shared in by almost every financier of any importance in the United States.

After the syndicate has been organized, the syndicate manager usually makes a call upon the members for a certain percentage, often twenty-five per cent of their subscriptions. This must be paid in cash. With these subscriptions as a basis, he borrows the balance of the amount necessary from banks and trust companies which may themselves be interested in the syndicate, and therefore disposed to assist him.

These loans he may make on his own security, with the pledge of the bonds or stocks which he has underwritten or purchased, on the certificates representing these securities, or he may, as above described, pledge in addition the responsibility of the members of his syndicate. He then sells the stocks or bonds by the ordinary methods employed in marketing securities, direct to the investor, indirectly through fiscal agents, and also by utilizing the various stock exchanges on which the securities are listed. The members of the syndicate may act as his agents and sell on commission.

The syndicate is organized for a certain term. At the end of that term, if the securities are not sold, two alternatives are open, either the syndicate can be extended, in which case the securities remain in the hands of the syndicate manager, and the loans which he has made to supply the cash to the corporation are renewed, or the syndicate is dissolved. The proceeds of the securities which have been sold are then applied to paying any loans which may have been incurred, and the unsold securities are distributed to the members of the syndicate, according to their several participations, payment being made in cash. It is customary to make at least one extension of a syndicate which has not been successful during its original term, and in some cases syndicates have been extended several times.

The method of dissolving a syndicate is illustrated by the following letter, addressed by J. P. Morgan & Company, managers of the syndicate which guaranteed the preferred stock conversion plan of the United States Steel Corporation, to the syndicate members.

PREFERRED STOCK RETIREMENT SYNDICATE—FINAL NOTICE

Dear Sir: Referring to our circular letter of Sept. 14, 1903, we beg to inform you that we shall be prepared to close the syndicate account on May 17, 1904.

Your subscription to the syndicate was for $3,750 bonds, of which amount 80 per cent was payable in

preferred stock and 20 per cent in cash at par and interest.

Having delivered to you on Oct. 1, 1903, a portion of the bonds payable in preferred stock, there remains still to be delivered to you the balance of such bonds, amounting to $1,000 bonds, ex-matured coupons, accounted for below:

On Oct. 1, 1903, we called from you 25 per cent of your cash subscription, leaving still due from you 75 per cent of such cash subscription, which, with accrued interest to May 17, amounts to..................		$564.18
Your share of the amount standing to the credit of the syndicate on May 17, 1904, including interest at 5 per cent per annum on the portion of cash subscription paid Oct. 1, 1903, will be	$325.50	
To which is added the amount of coupons due Nov. 1, 1903 (7 months), and May 1, 1904, on the undelivered portion of bonds payable in preferred stock mentioned above....	54.18	379.68
This leaves a balance due from you in final settlement of		$184.50

for which kindly hand us your check on Tuesday, May 17, 1904, upon receipt of which and upon surrender of your certificate of participation, properly indorsed, we shall be prepared to deliver to you all the bonds subscribed for by you in cash, together with the balance of the bonds payable in preferred stock, as stated above, making total delivery to you at that time of $1,750 bonds. Fractional amounts of bonds will be adjusted in cash.

(Signed) J. P. Morgan & Co.

The syndicate manager may not have chosen to carry on the operation with the proceeds of loans, and may have called upon the members of the syndicate to pay up the full amount

of their participations before the term of the syndicate has expired. In this case, since they have all paid for the securities, the dissolution of the syndicate involves merely the distribution of the unsold securities among the members.

In settling the affairs of an underwriting syndicate, the syndicate manager renders no accounting to the members, nor is any accounting asked for. The transaction is based upon good faith, and legal guarantees are not required. There is no instance on record where a banking house of good reputation was sued for an accounting by members of a syndicate which it had organized. If crookedness or sharp dealing were attempted by a syndicate manager, even though he renders no accounting, the fact would soon become known, and would make it impossible for him to secure participation in future syndicates. Thus the accounting is really not necessary in order to insure fair dealing. Furthermore, if any member of a syndicate fails to pay for his bonds as requested, no proceedings are instituted against him by the syndicate manager. He is simply dropped from the manager's list, and it may be difficult for him to obtain financial assistance or an opportunity to participate in profitable financial operations in the future. Instances of such failure are, however, rare. The consequences to a man's reputation are serious, and syndicate members will strain every resource, and will dispose of their participations even at a heavy sacrifice, in order to make good their word to the syndicate manager.

Participations in underwriting and subscription syndicates are sometimes very profitable. If market conditions are auspicious, it frequently happens that the entire issue of securities may be sold to the public before any calls are made upon the subscriber. Usually, however, a portion of the subscription is called, but if the syndicate is successful, only one call is likely to be made. The syndicate which subscribed $200,000,000 to assist in the flotation of the United States Steel Corporation, paid in $25,000,000 and received back $65,000,000. On the other hand, the security markets may

be unfavorable, owing to stringent money markets, or to distrust of some classes of investments, and syndicates may be left with large amounts on their hands which their members must carry, sometimes for years, before they can dispose of them at a profit. An example of this failure is furnished by the dissolution of the syndicate which underwrote the convertible bond issue of $12,000,000 for the Erie. The syndicate was dissolved in January, 1907, with three fourths of the bonds remaining on hand. The failure of the International Mercantile Marine bond syndicate whose members were forced to take practically all the bonds, also shows how uncertain are the profits in these ventures. Syndicate participations are frequently taken by investors and financial institutions in order to secure bonds at a lower price than could be had from any other source of supply. This practice gave rise to grave abuses, since participation for directors and officers of life insurance companies, for example, would be carried by the company, at the company's risk, with nothing but a general understanding that it would be indemnified by the beneficiary for any loss. Such participations are now illegal in New York for insurance companies.

CHAPTER XIV

THE DETERMINATION OF PROFITS

The financing of the corporation has now been completed. The money for the construction of its plant and the inauguration of its business has been paid into its treasury; its construction work has been completed; it has been formally launched as a going concern. We have next to consider the determination of its profits in order to indicate the principles which govern their management and distribution.

The subject of corporation finance is not concerned with the methods by which profits are made. The principles of profit making are of general application, and are not affected by the form of organization under which a business is conducted. They are alike for the partnership and for the corporation. It is, however, of peculiar importance to a corporation, even more important than to a partnership, that its profits should be, at regular intervals, accurately determined. The partnership or the private corporation, whose owners are in close touch with its affairs, may tolerate a degree of laxity or inaccuracy in the determination of its profits. If too much is drawn from the business in one year, the drawing accounts of the partners may be reduced the year following. If profits are overestimated, and the business on that account is too rapidly expanding, it may be possible, by economizing and contracting the scale of operations, for the concern, without injury to its credit, to regain its former position. These private corporations, moreover, grow out of earnings. They do not so often appeal to the outside investor, as the public corporation is forced to do, for funds

with which to enlarge their business. Their shares and evidences of debt are not dealt in on the public exchanges. Partnership interests are not expressed in negotiable form, and the shares of private corporations are to a less extent employed as collateral for loans. For these reasons, while it is essential for every business enterprise to ascertain its exact financial status at fixed intervals, the accurate determination of profits for the partnership or the private corporation is less essential than for the public corporation.

The stocks and bonds of public corporations which appeal to the investor to provide them capital, are widely held by individuals and institutions who draw income from these securities. This interest should be regularly paid, and dividends should be distributed without serious and sudden changes in their rates. These regular payments can only be counted on if the fund out of which they are to be made is exactly determined. The securities of public corporations, moreover, are usually listed on the exchanges and are bought and sold every day. A free market for their securities is of great importance to corporations. They are enabled, by this means, to obtain, from time to time, additional sums of money for the enlargement of their business. A primary essential to a free market is accurate information concerning the financial status of the companies issuing these securities. Corporation stocks and bonds are deposited in enormous amounts with banks and trust companies as collateral for loans, and the bank cannot lend intelligently, unless it is placed in the possession of all essential information concerning the affairs of the enterprise.

It is not merely necessary that their profits should be accurately determined by public corporations, but it is equally essential that they should be stated in simple and intelligible form, so that the investor and the banker can, without difficulty, reach an accurate conclusion as to their earning power and financial condition. For a long time, American railway companies did not recognize the necessity of making such statements of assets and earnings, and their stocks were the

objects of speculation which always thrives upon uncertainty. This condition has long since passed away. The reports of our railroad companies, even before the law compelled them to make an accurate determination of their profits and a full statement of their financial condition, leave little to be desired. The industrial corporations are more remiss in making statements of their condition. Until the United States Steel Corporation set the example by publishing what is, probably, the most satisfactory report of any of the large industrials, officials of these corporations generally refused to give information, on the ground that disclosure of the condition of their business would give an advantage to their competitors. In time, however, this aversion to revealing the condition of their affairs was worn away by the necessity of obtaining a broad market for their securities, which could not be had without some information upon which the investor could base his judgment. The reports of industrial corporations are still, as a class, far from being as complete as the reports of the railroads. Street railway and public service corporations generally give even more meager information than do the industrials. Steady improvement in the direction of publicity is, however, everywhere evident. Even if the laws do not intervene to compel full statements of income and expenditures, assets and liabilities, the force of financial opinion may be relied upon to accomplish this result.

It is not necessary, as corporation officials have feared, that the amount of information which is necessary to acquaint the investor with the financial condition of the property in which he is interested should involve the disclosure of the secrets of the business. This may be illustrated by an instance related by a public accountant, which shows the possibility of harmonizing publicity for the investor with secrecy as to essential details with which the investor had no legitimate concern. The accountant was engaged to make a report on a newspaper property which was about to be sold by order of the court. The report was especially full and detailed, but not sufficiently explicit to suit certain persons,

who requested information as to the returns from advertising and the amount paid for salaries. The Master in Chancery refused to allow this information to be given on the ground that the competitors would discover the secrets of the business. The accountant pointed out, however, that by presenting merely the totals, without mentioning individual items, this danger could be avoided, and at the same time the investor could be fully informed. The competitors of this paper could not have profited from information as to the aggregate salaries paid or the total amount of advertising receipts. What they were concerned to discover, was the amount paid to certain individuals on the staff, and the terms of particular advertising contracts. This information, however, would have been of no assistance to the investor, and could easily have been dispensed with.

Recognizing the necessity, from the standpoint of the public corporation, that its profits should be exactly ascertained, and that clear and intelligible statements of its condition should be made, we proceed to consider the methods by which the determination of profits is accomplished. The profits of a corporation may be defined as the increase in the net worth of a corporation over a given period. The net or present worth of a business consists of the difference between assets and liabilities. In a manufacturing concern, the statement of assets and liabilities of a given year might be as follows on January 1st:

Assets		Liabilities	
Plant	$1,000,000	Capital stock	$100,000
Accounts receivable	500,000	Bonds secured by mortgage	500,000
Materials and supplies	300,000	Pay-rolls, vouchers, etc	200,000
Cash	250,000	Surplus	1,250,000
	$2,050,000		$2,050,000

On December 31st of the same year, if the business had been prosperously conducted, and no withdrawals had been made, the statement might be as follows:

Assets		Liabilities	
Plant	$1,250,000	Capital stock	$200,000
Accounts receivable	600,000	Bonds	500,000
Materials and supplies	400,000	Pay-rolls, vouchers, etc	350,000
Cash	350,000	Net present worth	1,550,000
	$2,600,000		$2,600,000

The results of this comparison would show in the following table of differences:

Net present worth, January 1st	$1,250,000
" " " December 31st	1,550,000
Increase	$300,000

It appears that the net present worth, the difference between assets and liabilities, usually called the "surplus," has increased $300,000 during the year. The company has succeeded in increasing its assets over the increase in its liabilities by this amount. During the year, however, various payments will have usually been made on account of interest and dividends. The amount of these payments must be added to the increase in surplus in order to ascertain the profits of the year.

The profits of a business are expressed in the following form which is used by the International Harvester Company to express the results of its business during 1908:

	1908
Total sales	$72,541,771
Manufacturing and distributing cost	59,615,222
Net earnings from operation	$12,926,549
Miscellaneous income	524,598
Total income	$13,451,147
Administrative and general expenses	520,769
Net income	$12,930,378

CHARGES:	
Total deductions	$4,044,695
Net profits	$8,885,683
Dividends	4,200,000
Undivided profits	$4,685,683
Previous surplus	12,006,306

This form, with unimportant modifications, is used by every corporation which makes any report of its condition. We start with gross earnings, the product of sales or commodities, services or contracts, according as the business is a manufacturing or jobbing company or a bank or insurance company. From the gross earnings of the International Harvester Company for 1908 these sales were $72,541,771. From these gross earnings are deducted the cost of running the business, maintaining the plant, and selling the product. For the International Harvester Company, this amount was $59,615,222. The difference between the receipts and the payments represents the net earnings from operation, in the above statement, $12,926,549. To this amount must be added items grouped under the head of other income. For the International Harvester Company, this "other income" was comparatively small, only $524,598, leaving total income at $13,451,147. This company next deducts administrative and general expenses before arriving at the balance of net income. It is a common practice to include administrative and general expenses with operating expenses. Making this last deduction, we arrive at the total of net income of the International Harvester Company of $12,930,378. This represents the combined earnings and income of the business during the calendar year ending December 31, 1908.

Various claimants now appear to this income. First comes the state which receives taxes; then the creditor with his demand for interest and sinking funds; then the corporation demanding that its plant shall be fully maintained, and that provision shall be made against the day when it is worn out; also asking money for insurance and losses inci-

dent to the conduct of the business. There is also the claim of the owner of property which the corporation holds under lease, known as rentals. These deductions, added together, make the "total deductions" by the International Harvester Company from income, before the owners can draw anything from the business, $4,044,695. Deducting this amount from the net income, there is a balance available for distribution to stockholders of $8,885,683. This company has $120,000,-000 of capital stock, equally divided between preferred and common stock. The preferred stock pays seven per cent dividends and the dividend is cumulative. It is necessary, if the profits permit, that dividends on the preferred stock should be paid. Seven per cent on $60,000,000 of preferred stock calls for a distribution of $4,200,000, leaving $4,685,-683 for the common stock. The directors of the International Harvester Company have recently declared a dividend on the common stock. At the date of this report, however, the business needed money for its development; it was not deemed wise to pay any common dividend, and the undivided profits, amounting to $4,685,683, were retained in the business. This amount was now transferred from the income account to the surplus account, increasing the excess of assets over liabilities from $12,600,307 to $16,691,989.

This addition to the surplus was accomplished by an increase in certain assets of the company and a decrease in certain liabilities which appear in the table on page 176. The balance sheet surplus represents the accumulations of undistributed profits over a series of years. It may, in turn, be distributed by a readjustment of the capitalization according to methods which will be discussed in a later chapter.

Having now defined the surplus of a corporation, we have next to examine the sources from which these profits are derived. We find these to be as follows:

First, income arising directly from the company's business.

Second, premiums on the sale of stocks and bonds of the company.

Assets	1908	1907
Property account	$63,680,776	$62,844,136
Deferred charges to operations	189,683	285,288
Insurance fund assets	400,832	....
Finished products, raw material, etc	33,854,933	35,140,416
Material purchased for current season	13,832,123	15,147,210
Farmers' and agents' notes	25,471,132	26,583,001
Accounts receivable less contingent reserve	10,840,098	12,708,509
Cash	9,339,055	3,573,894
Total	$157,608,632	$156,282,454
Liabilities		
Preferred stock	$60,000,000	$60,000,000
Common stock	60,000,000	60,000,000
Purchase money obligations	....	3,450,195
Bills payable	8,286,664	10,465,775
Audited vouchers, accrued interest, taxes etc	4,729,387	4,543,443
Preferred dividend payable	1,050,000	1,050,000
Reserves	6,850,540	4,766,734
Surplus	16,692,041	12,006,307
Total	$157,608,632	$156,282,454

Third, profits arising from the sale of other assets of the company no longer needed for its business.

Fourth, profits arising from a revaluation of the company's property.

We have now to consider these sources of profits from the standpoint of an accurate determination of their several accounts. Gross earnings represent the receipts from the sale of services, contracts, or commodities. These receipts are in the form either of cash or of promises to pay cash. In ascertaining their amount, it is necessary to exclude all items such as rebates to customers and cash discounts. When the business is carried on among several departments or sub-companies, all sales between departments or subsidiary companies should also be excluded. It is also necessary to exclude all bad or doubtful debts and accounts.

Operating expenses are divided into two general classes: expenses incurred in operating the plant; and expenses incurred in keeping the plant in good condition. A railroad company divides its operating expenses into five classes, namely, maintenance of way and structures; maintenance of equipment; conducting transportation, traffic, and general expenses. The nature of these expenses may be understood from some of the items under each classification. The largest items under maintenance of way and structure are track maintenance, road cleaning and ballasting, rails, ties, buildings and grounds and track material. Under maintenance of equipment, the largest items are repairs of locomotives, repairs of passenger and freight cars, and repairs of tools and machinery. Under conducting transportation, we find the following principal items:

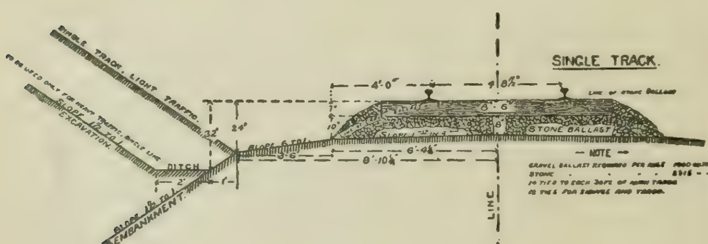
Station service,
Road men,
Road enginemen and firemen,
Fuel for locomotives,
Engine house men,
Trainmen,
Telephone and telegraph.

The general expenses and the traffic expenses consist mainly of salaries paid to employees and officials.

We have here illustrated the essential distinction between the cost of running the road and the cost of maintaining it. All those expenses involved in obtaining freight and passengers, in receiving and caring for them, in transporting and delivering them in safety to their destination, are classed under the head of traffic and conducting transportation. Those expenses, on the other hand, which result in keeping the plant of the railway, its track, bridges, stations, cars, locomotives, round houses, repair shops, in good condition and in efficient working order, are classed under maintenance expenses, and, for purposes of convenience in railway accounting, are divided into Maintenance of Way and Structure, and Maintenance of Equipment.

The cost of operation—in the railway field, the cost of conducting transportation—need not further concern us. Its principles vary with every industry, and have no special significance for the subject of corporation finance. The cost of maintenance, however, is a division of operating expenses in which rules and principles have been developed of general application, and of peculiar importance in interpreting the financial operations of public corporations.

The maintenance of physical property involves the following: First, the establishment of certain standards of physical condition which may be either printed in books of rules or may exist only in the minds of foremen and superintendents; second; the expenditure of money on labor, appliances and materials in order to keep the property in a condition corresponding to this standard. A standard, for example, for a railway track is a description of the track and roadway as it ought to be, in other words, an ideal which the Maintenance of Way Department is constantly striving to attain, but which, while they may never fall far below, they never quite reach. The accompanying diagram gives



in cross section the standard roadbed adopted by the Pennsylvania Railroad. This diagram represents the condition of the roadbed as it should be if it is to be preserved at its highest efficiency. This diagram is supplemented and explained by specifications which furnish detailed direction to the Maintenance of Way Department as to the methods

which must be followed in keeping the track in repair. Some of these specifications are as follows for the Pennsylvania Railroad Company:

1. *Roadbed.* The surface of the roadbed should be graded to a regular and uniform subgrade, sloping gradually from the centre toward the ditches.

2. *Ballast.* There shall be a uniform depth of six (6) to twelve (12) inches of well-broken stone, or gravel, cleaned from dust, by passing over a screen of one-quarter-inch mesh, spread over the roadbed, and surfaced to a true grade, upon which the ties are to be laid. After the ties and rails have been properly laid and surfaced, the ballast must be filled up as shown on standard plan; and also between the main tracks and sidings where stone ballast is used. All stone ballast to be of uniform size; the stone used must be of an approved quality, broken uniformly, not larger than a cube that will pass through a two-inch ring. On embankments that are not well settled, the surface of the roadbed shall be brought up with cinder, gravel, or some other suitable material.

3. *Cross-ties.* The ties are to be regularly placed upon the ballast. They must be properly and evenly placed, with ten (10) inches between the edges of bearing surface at joints, with intermediate ties evenly spaced; and the ends on the outside on double track, and on the right-hand side going north or west on single track, lined up parallel with the rails. The ties must not be notched under any circumstances; but, should they be twisted, they must be made true with the adze, that the rails may have an even bearing over the whole breadth of the tie. For all tracks on main line and branch roads, the rules governing the use of cross-ties shall be as follows:

a. First-class cross-ties shall be used in tracks where passenger and freight trains run at full speed.

b. For tracks where the trains run at slow speed, new second-class ties shall be used. For all tracks in yards, or temporary tracks laid for construction purposes or otherwise, second-class and cull ties, or

good second-hand ties taken out of main track shall be used.

. . . . . .

Specifications for Cross-ties, Revised March 24, 1902.

Kind of Timber.—The approved timber for cross-ties shall be White Oak, Rock Oak, Burr Oak, Post Oak, Locust, Walnut, Yellow Pine or Chestnut. Other kinds of wood will not be accepted, unless regularly ordered and specified.

Quality and Manufacture.—The timber should be cut in the fall and winter, say from September 1st to March 1st. All ties must be cut from good sound living timber, well manufactured to size and length, straight, free from large, loose or decayed knots, splits, shakes or any other defects that may impair the strength and durability of the timber for the purpose intended; pole ties must have two parallel face sides, hewn or sawed with the grain of the wood out of wind or twist, and stripped of bark; square-sawed ties must be sawed with the grain of the wood; square-hewed ties may be made of split timber, but must be straight and out of wind or twist. Yellow pine must be long leaf, grown in the interior belt of Georgia, Florida, Alabama or Mississippi. Yellow pine ties must be square, and may be hewed or sawed; the heart should be in the center and not more than one inch of sap, measured on the face or side, will be allowed on each corner. All ties must be sawed off square at the ends.

Pole ties less than six inch face, square sawed or square-hewed ties less than seven inch face, and Yellow Pine ties less than eight inch face, will be classed as culls, and will not be accepted unless specially ordered.

Classes of Ties.—The following table [see page 181] shows the kind, size and permitted variation of cross-ties:

Kind of Ties	Size	Variations in Thickness	Variations in Width	Variations in Length
No. 1 Pole...........	7″ thick x 7″ face x 8′ 6″ long..	¼″ under and ½″ over 7″	7″ over.................	1″ under and over
No. 2 Pole...........	Not less than 6″ face.........	Not exceeding ¾″ under 7″	....	1½″ under and over
No. 1 Square Sawed...	7″ thick x 9″ face x 8′ 6″ long..	¼″ under and ½″ over 7″	1″ under and 5″ over......	1″ under and over
No. 2 Square Sawed...	Not less than 7″ face.........	Not exceeding ¾″ under 7″	....	1½″ under and over
No. 1 Square Hewed...	7″ thick x 9″ face x 8′ 6″ long..	¼″ under and ½″ over 7″	1″ under and 5″ over......	1″ under and over
No. 2 Square Hewed...	Not less than 7″ face.........	Not exceeding ¾″ under 7″	....	1½″ under and over
No. 1 Yellow Pine.....	7″ thick x 9″ face x 8′ 6″ long..	¼″ under and ½″ over 7″	Not over 5″.............	1″ under and over
No. 2 Yellow Pine.....	*Not less than 8″ face, including sap allowance. If face is all heart, should be classed as No. 1	¼″ under and ½″ over 7″	....	1½″ under and over

. . . .

c. On all running tracks where the weight of rail is seventy pounds per yard and over, fourteen ties shall be used to each thirty feet of track, and for all tracks in yards and for temporary use, *not more* than twelve ties shall be used for each thirty feet of track.

Line and Surface.—The track shall be laid in true line and surface; the rails are to be laid and spiked after the ties have been bedded in the ballast; and on curves, the proper elevation must be given to the outer rail and carried uniformly around the curve. This elevation should be commenced from fifty (50) to three hundred (300) feet back of the point of curvature, depending on the degree of the curve and speed of trains, and increased uniformly to the latter points where the full elevation is attained. The same method should be adopted in leaving the curve.

d. In removing cross-ties from the main tracks, they shall be taken out only as they become unfitted for service, in the manner generally known as "spotting ties," and not by entire renewals in continuous sections, and Subdivision Foremen will be held responsible for the proper observance of this rule. It shall be the duty of the Supervisor or his assistant to walk over the track with the Foreman and personally inspect the ties to be renewed before he authorizes the same to be taken out and replaced with the new ones.

. . . .

Ditches.—The cross-section of ditches at the highest point must be the width and depth as shown on the standard drawing, and graded parallel with the track, so as to pass water freely during heavy rains and thoroughly drain the ballast and roadbed. The line of the bottom of the ditch must be made parallel with the rails, and well and neatly defined, at the standard distance from the outside rail. All necessary cross drains must be put in at proper intervals. Earth taken from ditches or elsewhere must not be left at or near the ends of the ties, thrown up on the slopes of cuts, nor on the ballast, but must be deposited over the sides of embankments. Berm ditches

> shall be provided to protect the slopes of cuts, where necessary. The channels of streams for a considerable distance above the road should be examined, and brush, drift and other obstructions removed. Ditches, culverts and box drains should be cleared of all obstructions, and the outlets and inlets of the same kept open to allow a free flow of water at all times.

Similar standard specifications exist for every part of the railroad's property. It is the duty of the Maintenance Departments to see that the property is always kept in this condition. A variety of agencies are constantly at work to lower these standards. The pounding of heavy trains throws the track out of alignment, grinds the ballast to powder, wears the rails, especially on the curves, and loosens the spikes and fish plates. And while the locomotives and cars are destroying the track they are constantly destroying themselves. Wheels become worn, frames loose, paint wears off, glass is broken, boiler tubes are filled with scale, furniture and fittings become dirty and dingy.

While the running of the trains is doing all this damage, the agencies of nature are ceaselessly at work upon the roadway. Rain, sun, frost and running water are constantly wearing away the roadway. Water seeps into the ties around the spikes, carrying in bacteria and fungi, and in time the wood decays. In the spring, when the ground thaws, the track is lifted and wrenched out of line and surface; erosion is constantly filling up the ditches and damming up water which settles around the ballast and helps on the disintegration of the roadbed. The ballast, from its own weight and that of the track and trains, settles into the ground. Sunshine, wind and rain unite to destroy paint and timbers. Frost makes rails and fastenings brittle. All these manifold agencies of destruction are incessantly at work to pull down the road below its established standard.

The property of the railroad is also subjected to occasional accidents, sometimes rising to the dignity of catastrophes. Streams may flood and wash away large sections of track

and numerous bridges, railway terminals may be destroyed by fire, numerous train wrecks from collisions or derailments are constantly occurring, destroying large amounts of property. It is the business of the Maintenance Department to combat these forces of destruction, and to repair the damage which is incessantly being inflicted upon the property of the company. The track and equipment of a railway are the subject of constant inspection and close scrutiny.

The work of the Maintenance Department of a corporation may be illustrated from the Maintenance and Repair Shop Practice of the Interborough Rapid Transit Company described in the *Street Railway Journal* for April 25th and May 23, 1908. This department has charge of keeping in good condition all the cars on the elevated and subway lines on Manhattan Island. The work is done in two shops, one at Ninety-eighth Street and Third Avenue, and the other at 148th Street and Lenox Avenue. These shops are equipped with machine tools, electric hoists and cranes, and the Ninety-eighth Street shop contains in addition a brass foundry and a paint shop. When a car needs any overhauling or repairs it is put into the shop, the elevated cars at Ninety-eighth Street and the subway cars at 148th Street. The selection of cars for overhauling is made on the basis of mileage. For the elevated roads, it is assumed that a car will run 65,000 miles before it needs attention. This standard has been modified for the subway cars so that each piece of equipment in the car, and the car itself, has a predetermined mileage which it is supposed to run before needing attention. As fast as this mileage is reached, the car is put into the shop and that particular part is overhauled. By this method the entire car does not need attention every time it reaches the shop. In the case of accidents to cars, general overhauling and complete repair may be necessary before the standard mileage has been reached.

The nature of the work done in these shops may be illustrated from the practice followed in painting the cars. Painting records and records of inspection for painting show the

date the car was last in the shop, the date last inspected, the date it should be sent to the shop, and the class of painting for which it is due. The cars are graded in four classes with regard to the condition of the paint: Class A, to be burned off and repainted from the wood up. B, to be scraped thoroughly, cut in, lettering and striping touched up and varnished. C, sash to be removed, burned off and painted; otherwise same as Class B. D, car to be scrubbed and varnished.

Inspection of cars is made on the road from time to time, and the cars are brought in on predetermined dates as required. When they come into the shop they are classified; their trucks are taken off to be taken to the truck repair shop; any required carpenter work is done on the car, all trimmings are stripped off and the sash and doors are removed; sashes needing repairs are taken to the mill and afterwards painted. The cars are now hauled on the shop trucks to the paint shop. When the painting is completed they are returned to the repair shop and mounted on their regular trucks which, in the meantime, have been overhauled and repaired. Every large corporation follows some such system in maintaining its plant and equipment, although the system is not always so well worked out as by the Interborough. Every manufacturing business, no matter how small, would profit by an imitation of the practice adopted by these large companies in the up-keep of their plant and equipment.

It is the custom of those corporations, whose accounting methods are constructed along conservative lines, to charge to maintenance not merely the cost of repairing the property, but also the cost of all renewals due to breakages or failures in service, and of replacements due to the substitution of some improved appliance. If the maintenance account were strictly interpreted, the difference between the cost of new rails or ties substituted for rails or ties which are either worn out or inadequate to carry the strain of heavier cars or engines, might be a charge to capital account. The usual practice, however, is to call all such expenditures better-

ments, and either to charge them direct to maintenance or into some account, such as extraordinary expenditure, created for the purpose. Such expenditures should not be charged to capital.

A betterment expense is one which raises the standard of construction. Examples of such expenditures, taking our illustration from the railroads, are the substitution of stone for gravel ballast, and of masonry embankments or steel structures for wooden trestles, replacing light rail with heavy rail, lining tunnels with brick or concrete, substituting ties treated with some preservative to prolong life for untreated ties, fencing right of way, elevating tracks in cities, and such like expenditures whose object is to raise the physical standard of the property. When this new standard has been established, it is the duty of the Maintenance of Way Department to maintain it in the same manner as the lower standard which it succeeds.

These betterment expenses, although they represent an increase in the cost of the property, should not, in the opinion of most accounting officers of corporations, figure on the balance sheet as an addition to any asset account. It is true that they may reduce the cost of operation. They may even enable the company to handle a larger business, or to handle its existing business more expeditiously and economically. On the other hand, they may do no more than maintain the earnings of the company at their former level. A railroad company has always to meet competition which may force it to reduce its rates, or to improve the quality and cost of its service. The rates and prices of all public service corporations are also liable to reduction by action of the legislature or some public service commission, and the improvements and economies resulting from betterment expenses may be no more than sufficient to offset the increased cost in operation, due to higher prices or higher wages.

Former President Roberts, of the Pennsylvania Railroad Company, in his report of 1890, explained the betterment policy of the Pennsylvania Railroad which has always been

to charge the cost of such expenditures to "Extraordinary Expenditures" as follows: "The next item is that of extraordinary expenditure not properly chargeable to capital account, and is one to which attention has been called by our English stockholders. They claim that this is a capital expenditure and should not be charged against the current income; it is made up largely of moneys expended in straightening the line, in improving the character of the stations, in providing additional track at various points, in changing iron bridges to stone, and wooden bridges to iron, and similar improvements that are necessary from time to time and that are not properly chargeable to capital account, because they do not actually increase the gross earnings of your property, but simply maintain it in a condition to effectively and economically handle the traffic at the low rates shown in the report, and enable it to earn the interest on the money previously invested."

President Roberts here shows why the Pennsylvania could not safely issue new capital for the betterments which he enumerates. In one period of five years, from 1898 to 1902, the Pennsylvania spent $33,804,000 out of earnings upon betterments, and yet the increase in the balance to the credit of profit and loss, representing the additions to the book value of assets resulting from these expenditures, was only $1,919,000. During this period of five years, $30,885,000 of earnings was apparently swallowed up in the property. The cost of these large additions to the value of productive assets was charged to capital account, but only in those cases where "they actually increased the earnings of the property." These betterment expenditures are only indirectly and remotely productive. They are demanded by the general advance in railway practice, and they may eventually become profitable. A conservative management, however, pays for them out of earnings and refuses to add their cost to the book value of the assets.

CHAPTER XV

THE DETERMINATION OF PROFITS—DEPRECIATION

Well-managed business enterprises, and especially public corporations to whose standing and reputation, as already explained, an accurate determination of their profits is essential, make provision out of their income for impairment in the value of their physical assets which is known as depreciation. The life of every tool, building, machine or structure which a company may own, with the possible exception of permanent structures, such as concrete bridges, wharves, permanent roadway, etc., is limited. No matter how carefully a machine may be repaired, no matter how attentive the Equipment Department may be to painting cars and rewinding armatures, the time finally comes when the machine, or car, or locomotive, or building is no longer fit for use. Every piece of productive property, like every normal individual, has a period of mature and vigorous life when repairs are at a minimum and work at a maximum, and a period of old age, finally ending in dissolution. This period of useful service, in a machine as in an individual, may be lengthened by proper care. If the individual does not observe the laws of health, if he works under unsanitary conditions, or is subjected to excessive labor, his working life is shortened. In the same way unless the machine is repaired when out of order, is sheltered from the weather, and is saved from undue stresses and strains, the term of its active life is reduced.

The termination of the active life of a machine may also be due to the discovery of some better machine for doing the

same work. Competition forces progressive business concerns to keep their plants up to date so that they can produce articles of good quality at as low costs as their competitors. A good illustration of this class of depreciation which is called "Depreciation due to Obsolescence" is seen in the rapid increase in the size of railway cars. Within the last twenty years, these have increased from a capacity of from fifteen to twenty-five tons to a maximum load of fifty-five tons, due largely to the substitution of steel for wood in construction. This increase in the size of railway cars has rendered a large number of cars obsolete before the normal term of their working life has expired. The increase in the size and operative power of the locomotive has had the same result. Numbers of engines are now doing good service on logging railroads and local lines which, without the improvement in locomotive construction, would still be running on the leading trunk lines.

The third cause of depreciation is changes in business conditions which may seriously impair or entirely destroy the productive value of properties in perfect physical condition. A marked reduction in the tariff on the finer grades of textiles, for example, would throw out of use a large amount of perfectly good machinery, and a street railway operating under a limited term franchise which it carries on its balance sheet as an asset, may find, as in the cities of Cleveland and Chicago, that the value of this asset is destroyed or greatly impaired by a change in public sentiment imposing additional burdens and restrictions upon street-railway companies.

Understanding now the regular and inevitable, as well as the accidental and contingent reductions in the value of a company's productive property, we can recognize the necessity of providing in advance for its replacement. In so far as these losses can be estimated with approximate exactness, an accurate provision can be made. Contingent and extraordinary losses, however, can only be anticipated by providing such sums as experience shows will probably be sufficient

to offset these losses, and there still remain the losses due to such causes as change in fashion or in the tariff, against which no foresight can provide because there is no method of predetermining the amount of the damage.

The losses due to depreciation, if provision is not made to apportion them over a series of years, may fall upon a business with such force as to annihilate it. When a plant is new, repairs are light and replacements are not necessary. This condition may persist for several years. In the meantime the management, not convinced of the necessity of making provision against the day when their plant shall be worn out, may have paid out all their earnings to their stockholders. At the end of the fifth or sixth year extensive renewals become necessary, machines are worn out or become obsolete; and a reconstruction, a rearrangement, or a relocation of the plant may be necessary. If money is not available for these purposes, all that the management can do is to issue stock or bonds and spend the proceeds, not in increasing the value of their property, but merely in maintaining it at its original figure.

An illustration on a small scale will serve: A man obtained a pumping contract from a railroad. The contract ran for ten years and called for a payment of $2,000 a year. The cost of the pump and other machinery was $5,000 and the operating expenses $1,000 each year. The owner gave but nominal supervision to the plant, which indeed was all that it required, and estimated his profits at $1,000 a year or $10,000 during the life of the contract. At the end of the time, however, when the contract came to be renewed, it was found that the pump was worn out, the $5,000 invested had been lost, and it was necessary for the contractor to raise another $5,000 for the purchase of new apparatus. Instead of a profit of $10,000 during the ten years, the actual profits of the business were only $5,000. A correct accounting system would have required the setting aside of $5,000 in such a form as to be available at the end of ten years for the purchase of a new pump.

The accounting for depreciation is managed by building up in the assets of the business an amount of value. Provision for depreciation is made as follows: A deduction is made from income of the amount estimated to be necessary in that year to provide for depreciation. This amount is kept in the business, either being held as a bank deposit, invested in securities, or spent in such a way as to increase the value of the company's property, for example, upon a new mill or a new piece of machinery. If an expenditure is made, cash is credited, and machinery or plant account, or the materials or securities purchased is debited. Then Profit and Loss is debited and depreciation reserve, appearing as a liability on the balance sheet, is credited. This plan is followed year by year, until a depreciation reserve of large amount may be built up as a liability to the business, balanced by various assets on which a certain amount of the income of the company has been spent.

Now suppose that, after a term of years, since depreciation does not usually count in the early stages of a company's operations, new equipment is necessary to replace that which is unfit for service, or that a complete overhauling, a relocation, or a reconstruction of the plant is necessary, including a general replacement of its machinery with machinery of new and improved design. The cost of the reconstruction or replacement is provided either out of the income of the company or by an increase of its bonds or stock. The entries are as follows: in case provision is made out of the current income of the year for necessary depreciation; cash is credited and the plant account concerned is debited; then depreciation reserve is debited and plant account is credited for the equipment thrown out. If the old machinery can be sold, cash is debited and the depreciation reserve is credited. If the cost of replacement is too large to be thrown upon the income of a single year, provision for the expense is made in the following manner: The company, we will suppose, presents the following balance sheet:

Assets		Liabilities	
Plant and Equipment	$2,000,000	Stocks	$1,000,000
Cash and current assets	500,000	Bonds	500,000
		Depreciation reserve	500,000
		Surplus	500,000
	$2,500,000		$2,500,000

Suppose now that $500,000 is required for replacements and that this amount, as an addition to the ordinary replacements and that this amount, as an addition to the ordinary replacements must be provided out of the proceeds of a bond sale. The entries are as follows: When the bonds are sold, bond account is credited and cash debited. Then plant account is credited and depreciation reserve is debited. Finally, the replacement is made, plant account being debited and cash credited. After this operation is completed, the balance sheet is as follows:

Assets		Liabilities	
Plant	$2,000,000	Stocks	$1,000,000
Cash and current assets	500,000	Bonds	800,000
		Depreciation reserve	200,000
		Surplus	500,000
	$2,500,000		$2,500,000

What has been done is to substitute on the balance sheet one kind of liability for another, reducing the depreciation reserve and increasing the amount of bonds, leaving the surplus, the difference between assets and liabilities, at its former figure. If the depreciation reserve is insufficient, a part or all of the surplus may be drawn upon.

The accumulated reservations for depreciation may be disposed of in two ways: First, they may be handled as a fund and kept in assets which are either specifically set aside for the purpose of making renewals, when these shall become necessary, or kept in the current assets of the business immediately available for use. This is the method adopted by

the United States Steel Corporation. The balances to the credit of sinking, depreciation and extraordinary replacement and improvement funds, which are all treated alike, on December 31, 1908, were included in the assets of the company in the following accounts:

Sundry securities at cost	$6,793,413.81
Cash	6,475,840.47
Invested in Tennessee coal, iron and railway company stock	4,222,537.11
In marketable securities at market value	723,380.34
In cash, special deposit	757,500.00
In current assets:	
Cash, loans, receivables, inventories, etc	23,573,641.94
	$42,546,313.67

This total was arrived at as follows: The balances to the credit of these various funds aggregated on December 31, 1907, $41,360,655.19. During the year 1908, there was set aside from income and by charges to current expenses $22,474,395.26, and other income and credits to the various funds brought up the total to $64,984,789.98. The amounts charged to the various funds during the year aggregate $22,438,476.31, leaving a balance as already stated, of $42,546,313.67. The United States Steel Corporation keeps its depreciation and other funds in a form readily available for use, invested in the current assets of its business as a part of its working capital. If the directors should conclude that a more definite separation of the assets representing these various funds should be made, they could make a special deposit of all the money, or invest it in securities which could be used for nothing else than to provide means for the replacement and renewals as required.

The International Harvester Company handles its depreciation account in a different manner. The accumulations in the plant depreciation and extinguishment funds of this company on December 31, 1908, amounted to $5,009,844. This amount appears on the balance sheet as a liability item under the head of "Provisional and Contingent Reserves." The total amount of these reserves at this date was $6,850,590.37.

In addition, the company had a surplus of $16,691,989.61; the two amounts together being $23,542,579.98. This sum represented the difference between assets and liabilities accumulated out of the profits of the business from the date of its organization. This accumulation was in part the result of increase in property account, in part the result of the payment of liabilities of which $3,173,398.21 under the head of "Purchase money obligations" were discharged in 1908, and in part of an increase in current assets. There is no attempt made by this company, so far as appears in its report, to keep its depreciation fund in any particular form of assets. As the money is reserved, it is apparently put to the most advantageous use, either in increasing the bank balances of the company or its stocks of railway materials, or in paying its debts, or in additions and improvements to its plant. The depreciation fund of the International Harvester Company is represented by amounts invested in different productive assets of the company without special segregation.

This method is the one ordinarily followed. Its general adoption by those companies which maintain depreciation funds has given rise to the statement often heard, that a depreciation reserve is only a bookkeeping item without special significance. There is no fundamental distinction between the surplus appearing on the balance sheet and the depreciation reserve also appearing as a liability. Added together, they represent the total accumulations out of income which are held in the business for the benefit of the business. The only difference between the surplus and the depreciation reserve lies in the fact that the former is usually regarded as the property of the stockholders to be distributed to them, from time to time, by various adjustments of capitalization, which will be considered in detail in a later chapter, while the depreciation reserve is regarded as something belonging to the business, which is to be withheld from the stockholders to make good any extraordinary replacements or renewals for which the current reservations from

income for the purposes of depreciation will not prove adequate.

There is, of course, a limit beyond which it is unprofitable for a company to accumulate a fund of this character. When the amount of the depreciation reserve fund has reached beyond the figure which in the judgment of the directors is necessary to protect the business against extraordinary accidents, it can then be treated as a part of the surplus and distributed to the stockholders. As an example of such a distribution, the stock dividend of the Pullman Company, voted on February 10, 1910, was explained by the directors in part as follows: "There were certain reserve accounts in the manufacturing department which had hitherto been held in abeyance to meet contingencies which were possible to arise (fire insurance), but which present conditions render improbable. These items, together with the existing surplus as shown in the published statement of the last fiscal year and the current results of operation, are regarded by the board as a justification for making this recommendation." The Pullman Company, in making these dividends, transferred certain of its reserves to its surplus account, and then substituted for a portion of the surplus an equal amount of capital stock.

The balance sheets of conservatively managed companies may show reserves in addition to the depreciation reserve. Thus the International Harvester Company maintains a reserve for collection expenses and receivables to provide for losses which may ultimately be sustained in the realization of bills and accounts receivable, and a cash reserve when it is deemed wise for a company to carry its own insurance. A company may also maintain a dividend reserve fund to make good any temporary shortages in income available for distribution to stockholders. These reserves are built up out of the unexpended balances of the annual appropriations to these several purposes. For example, the International Harvester Company provided for contingent losses on receivables in 1908, $650,000. The debts which were charged off as uncollectable

during 1908 amounted to only $228,048.15, so that there was an addition to the reserve for contingent losses on receivables during the year of $421,951,85. The efforts of this company are constantly directed toward reducing the losses against which these reserves are established to provide. It has spent large sums to equip its works and other buildings with automatic sprinkling systems and the latest devices for protection against fire, and it carries on continually a systematic investigation into the financial responsibility of prospective customers who give notes for purchases. This insures to the company a high grade of notes and accounts. These precautions, and the care taken to reduce losses, tend to increase the balances annually added to these various funds which may in time be carried to such a height that a portion of them can be distributed to stockholders.

These reserves are handled in the same manner as the reserve for plant depreciation, with the exception that the insurance reserves and the dividend reserves, in order to be immediately available for use, should be invested in good securities set aside for the purposes of these funds. As an illustration of this segregation, we find that the balance in the fire insurance reserve of the International Harvester Company of December 31, 1908, was $671,093.23, of which $400,832.20 had been invested in income-bearing securities on that date. Since that date the balance of the fund has also been invested in income-bearing securities.

In calculating depreciation, the first step is to determine the amount necessary. This is figured as a percentage of the cost of property to be depreciated. The percentage is obtained by estimating, sometimes in great detail, the active life of different kinds of equipment and dividing the result into 100 to obtain the annual rate of depreciation. By the method ordinarily followed, no account is taken of compound interest. If a business or property is estimated to last for twenty years, five per cent of this cost is assumed to be reserved out of income in each year in order to make good the annual depreciation. The Chicago Union Traction Com-

pany, for example, has adopted the following rates for its power-plant equipment:

	Life		Rate
Track, ties, bonding, etc.	12.85 years;		7.75%
Paving and grading:			
Granite block	16	"	6.6%
Cobblestone	25	"	4%
Electric equipment of cars	12–15	"	8.5% to 6⅔%
Iron poles	20	"	5%
Power-plant equipment	15	"	6.66%
Shop tools and machinery	20	"	5%
Buildings and improvements	50	"	2%

These various percentages are applied to the costs of the equipment, and the results added together are assumed to give the annual requirement for depreciation for that year.

These rates, however, are subject to wide variations under different conditions. Mr. C. I. Sturgis [1] explains these variations in relation to railway equipment as follows:

> On a railroad, the life of ties varies with soil and climate; the life of bridges depends on the weight of locomotives running over them; the life of locomotives depends on the quality of water and coal with which they are fed, and there is hardly a railroad tool or machine the life of which does not depend on local conditions, and even if, in determining depreciation, we could approximately estimate such variable factors as these, we would still have to consider what in the end will be the cost of the new articles to replace the old, and with markets ever fluctuating that is impossible definitely to determine. Furthermore, prosperous roads, in maintaining high standards, consider equipment is worn out when, on poorer roads, it would be considered still good for many years of service.

While admitting the influence of local conditions upon assumed rates of depreciation, it is possible to give proper weight to these influences on the basis of experience in that locality, and to ascertain, with a degree of accuracy, the life

[1] *Electric Railway Journal*, December 18, 1909.

of the company's property. It is also possible to ascertain, as we have explained in our discussion of maintenance, the effect of high and low standards of maintenance on depreciation. Property which is well maintained will last much longer, and give more effective service during its life, than where maintenance is neglected. We may conclude, therefore, that depreciation due to wear and tear and to natural decay can be closely approximated.

Depreciation due to obsolescence and extraordinary accidents involving extensive expenditures upon the plant cannot be estimated even approximately. A case came recently to the writer's notice where the owner of a textile mill had imported an expensive machine from England and estimated that it would last only five years. He therefore assigned to it a depreciation rate of twenty per cent. Within two years, however, this machine was displaced by a better one, so that the correct rate should have been fifty per cent. Other illustrations are the passage of city ordinances requiring large expenditures on track elevation or an electrification to abolish the smoke nuisance. Such changes as this cannot be foreseen. It is impossible to provide against them. Partial provision, it is true, may be made in the manner already indicated by establishing various rates of depreciation and, by improving the business methods of the concern, accumulating reserves against various contingencies. These reserves are available for emergencies. But even the most conservative company cannot make suitable provision out of its income accounts to protect it against any contingency which might arise. For example, depreciation on telephone equipment can be figured at ten per cent per annum. This will provide for the replacement of the plant at the end of ten years. But suppose the town is visited by a hurricane and most of the plant is destroyed. This would be a contingency against which no foresight consistent with ordinary business practice would provide. All that can be done in the event of such a catastrophe is for the owners of the business to take their loss and build anew, increasing their toll rates,

if need be, in order to regain the money spent for the reconstruction of the plant.

As an offset to this sort of depreciation, several accountants and engineers have urged the natural appreciation in the value of the property due to the development of its business. This phase of depreciation accounting is discussed by Mr. Frederic A. Delano, president of the Wabash Railroad,[1] as follows:

> In most cases the depreciation due to the diminished value of equipment, track, bridges, structures of all kinds, shops and shop tools already referred to, is limited, as has been explained, and is, furthermore, a good deal more than counterbalanced by the appreciation due to the fact that the age of the railroad has given it an established business. This amounts to a good deal more in the case of a railroad than what is called "good will" in the case of a mercantile corporation. As a railroad is developed, industries, mines, factories, etc., are established along its tracks, with switches and side track facilities, towns grow up along it, and a certain amount of business becomes assured to it—business which it takes years and a large expenditure of money and energy to develop—all of which is charged into current operating expenses and should be considered as an offset to any depreciation of the property.
>
> Besides the appreciation due to this cause there is, of course, an actual physical enhancement of value due to the condition of the roadbed and embankments becoming better solidified, the water courses established and the original structures gradually replaced with others of a more permanent character, even without any addition to capital account; thus wooden trestles, bridges, culverts, etc., have been filled with earth or replaced by steel or iron, stone or concrete.
>
> No account is taken and no estimate can be made of the enhanced value of the railroad property (right of way and terminals) due to the enhanced value of the land, even though the existence of the railroad

[1] *Railway Age Gazette*, March 27, 1908.

> may have contributed largely to the development of the country through which it runs. The railroad corporation suffers by reason of this enhanced value which it has so largely contributed to create if it is compelled to purchase any additional property, as well as in the increased amount of the taxes it is called upon to pay each year as its contribution to the needs of the growing communities; but it has not been usual to make any allowance for this. Those who have had the greatest experience with railways generally believe that the enhancement in value or appreciation of the property in the direction already referred to far more than balances the depreciation, especially when it is remembered that the total physical depreciation, under proper maintenance rules, is, without doubt, limited to about half the first cost of the property subject to depreciation.

The considerations advanced by President Delano should be taken into account in estimating depreciation rates. In the writer's opinion, it is unsafe to go so far as he does in claiming that appreciation offsets all depreciation. This enhancement in the value of a business is dependent to a large extent upon the conditions of trade. Certainly, from 1892 to 1897, there was no appreciation in the value of railway property in the United States. At this time a large amount of railway mileage was in the hands of receivers, and railway earnings were greatly depressed. It is true, however, that under ordinary conditions the appreciation to which the president of the Wabash refers is present in every well-managed concern; and, while it does not seem wise to take it into account as offsetting depreciation due to use, it will go far to offset depreciation due to obsolescence and extraordinary accidents.

In final summary of the rules for establishing rates of depreciation, the following may be taken as conservative: First, charge to maintenance the cost of minor replacements, even if the cost of the property substituted for that worn out or displaced by a better machine is greater than that originally

purchased; second, maintain depreciation rates based on standards established by engineers familiar with the business in which the corporation is engaged, and after making due allowance for special and local conditions; third, provide additional reserves for special classes of losses not covered by outside insurance.

Our final topic for discussion under the head of depreciation concerns the comparison between sinking funds and depreciation. There is substantial identity between these two classes of deductions from income. The sinking fund, whether maintained against so-called "wasting" assets—that is, coal or ore—or against the plant of an electric railway, or the terminable franchise of a public service corporation, up to the percentage of the total cost of the company's assets which is represented by its bonds, and up to the percentage of the cost of the property which is represented by the sum of annual appropriations for the sinking fund, is usually regarded as the identical equivalent of a depreciation charge. If the cost of the entire property of a company is represented by its bonds, which often happens, and if its life is twenty years, a sinking fund of five per cent on the bonds is the same as a depreciation of five per cent on the cost of the property. At the end of the twenty years, the plant is worn out, the bonds are paid, and the company is back where it started, with the addition of the good will and prestige which it has accumulated. It can then incur a new debt for the original amount, probably at a lower rate of interest, rebuild its plant, and maintain its surplus intact.

The identity of the sinking fund and the depreciation charge may be admitted, however, only with important qualifications. The depreciation fund should be available for replacements when these are required. When a sinking fund is invested in bonds, whether these are canceled or held, it is not available for current replacements, but only for extinguishment of the company's debt. The later forms of sinking fund, however, contain, as noted in a former chapter, certain provisions which remove the foregoing objection to

identifying a sinking fund with a depreciation charge. If the bonds purchased for the sinking fund can be reissued to provide funds for improvements and extensions, or if the sinking fund can be invested in the plant at the option of the trustee, the sinking fund and the depreciation charges are in all particulars the same, and the amount of the sinking fund established should be deducted from the assumed rate of depreciation. If the company maintains a sinking fund against its debt, and also allows rates of depreciation on the cost of its physical property, it is, to the extent of the sinking fund, duplicating its depreciation charge, and accumulating reserves in its asset accounts which will eventually come to the stockholders, or which may be drawn out in case of emergency.

After ascertaining the total income of the company, consisting of net earnings from operation plus other income, certain deductions must be made known as fixed charges, which include taxes, interest, and rental. The only question which may arise concerning these payments is the treatment of interest paid on bonds during the construction period. It is customary to include this in the construction cost, issuing enough securities not only to provide for the cost of the plant, but to pay interest on the bonds while the plant is building. As long as no secret is made of the matter, and it is well understood, there can be no reasonable objection to the practice. All that could be required is for the stockholders to advance the money necessary to pay interest on bonds during the construction period.

The final item of charges consists of such miscellaneous items as commissions on sales of securities and other expenses which are chargeable against income, but which cannot properly be classified either as operating expenses or as fixed charges. Companies often include as "other charges" the cost of betterments and additions which, in the judgment of the directors, are not properly chargeable to capital account. This has been discussed in connection with depreciation. Such expenditures should be charged to operating ex-

pense rather than to fixed charges. The balance remaining after these charges have been paid is the surplus earned for the stock during the year, out of which dividends may be paid. Another source of surplus consists of profits from premiums on the sales of securities issued by the company. Discounts on all sales of securities are to be considered as losses and charged against the income of the year. For the same reason, premiums received are to be regarded as profit.

The next item in the income account is income from other sources. This is made as follows:

> Interest received on bonds of others companies;
> Dividends on stocks of other companies;
> Rentals of property owned by the company and leased to outsiders;
> Interest on the company's bank deposits or on any loans in which it may invest its cash balance.

These receipts are usually incidental to the main operations of the company.

Business corporations are not primarily investment companies. They are organized to transact a railroad or manufacturing or trading business; and, although they may acquire securities in the course of their regular business, these securities are usually acquired for other purposes than to obtain revenue. A railroad corporation, for example, may purchase an interest in the stock of another company with which it exchanges a large amount of traffic, and may receive a dividend on this stock. The principal advantage of the purchase is not, however, to receive the dividend, but to obtain a favorable traffic agreement.

Again, railroad companies may build new mileage through subsidiary companies to which they advance money, taking the bonds and stocks of the subsidiary companies as payment and holding these in their treasury. In this case, instead of treating the operations of all the companies under their control as a unit, we have the distinction between lines directly operated and lines controlled. In reality, however, the re-

turns on the stocks and bonds of the subsidiary, while in the treasury of the parent company, represent merely a part of the operating income of the entire system.

The item of interest on bank deposits figures largely in the accounts of profitable corporations during periods when they are not expanding their operations, especially when their receipts are evenly distributed throughout the year, and their dividend and interest payments are made at periodical intervals. Under these circumstances, there is necessarily a considerable accumulation of money to the credit of the company, and this money they may either leave on deposit, receiving the bank rate of interest, or they may lend it out at a higher return than the banks will pay. During periods of great business activity, however, this source of income is ordinarily not available, since the corporation needs all of its money to conduct its regular operations, and is usually a heavy borrower besides.

Profits from premiums on securities sold are essentially different from profits or losses derived from income account. When securities of a company are sold at a premium, the usual practice is to show in the balance sheet as a capital liability only the par value of the security sold, and to credit to surplus, or profit and loss account, the premium received above the par value. Profits derived from the sale of capital obligations should be reserved as capital, unless the company is dissolved, and should be separately stated, else dividends may be paid while money is being lost in operation.

In practice, this separate statement of premiums on sales of securities is rarely made. The consequence is that directors may get a wrong idea of the profits of the business, and may pay dividends which are not warranted by the earnings from operation. The practice of investing these premiums in productive assets is, however, so well established that the danger of basing dividends upon them is remote. A similar disposition is usually made of profits received from the sale of unpledged treasury assets, usually consisting of securities. Unless the total proceeds are distributed to stock-

holders as a special dividend, the practice is to invest the entire proceeds in the improvements in capital assets. Such a disposition was made by the Pennsylvania of the proceeds of the sale of the coal stocks following the passage of the Hepburn Law in 1906. A large profit was shown, but the entire proceeds were invested in the property.

Discounts on securities sold are treated as losses. If small in amount, they are charged against the income of the year. Discounts on bonds or stock sold at the outset for original construction are usually included in the cost of construction.

The third source of surplus is "profits and losses from the sale of assets." A company may have operated a factory situated in a large city where land values were steadily appreciating. In time, the growth of the company's operations make a country location desirable. The city real estate then comes up to be sold, and it is found that its value is greatly increased over its original cost. This increase in value is to be taken as a profit, but since the profit was not earned during a single year, but represented the appreciation in value over thirty years, it will be improper to count this in the surplus available for distribution to stockholders except as a special dividend. It will be treated in the same manner as profits arising from premiums on the sale of securities. In cases, however, where the company purchases and sells property in the same year and shows a profit on the transaction, this profit may be included in the annual profits of the company upon which the distribution of profits is to be based.

Profits arising from the revaluation of assets are doubtful. It is frequently necessary, when the property of a business has been subjected to some unusual damage which is too great to be covered by the ordinary rate of depreciation, for example, the discovery of new and richer deposits of iron ore which will reduce the valuation to be legitimately placed upon a company's iron-ore deposits, to write down the book value of assets in the form of a loss on the single year's operation, or, if the depreciation is excessive, to spread this

loss over a series of years. On the other hand, it has been urged that the writing up of assets where property has appreciated in value is equally legitimate. This can be admitted only within narrow limits. It is entirely proper in the case of securities owned where the market value can be ascertained, and where the increased income corresponds to the increased price. Beyond this, however, the "writing up" of assets is of doubtful propriety. It is safer to maintain a book value of securities based upon cost, less depreciation, and to leave the surplus account undisturbed by any appreciation in their market value.

The danger of thus appreciating assets may be seen by an illustration. The property on which the Broad Street Terminal of the Pennsylvania Railroad Station stands has increased over 400 per cent since purchase. If this piece of real estate was to be revalued, its original cost to the company would be quadrupled. Broad Street Station is, however, not to be sold. It will for many years continue to be used for the purposes of the company. It is altogether probable that the contribution of this terminal location to the profits of the Pennsylvania Railroad has not increased as rapidly as its value as real estate. At the same time, it is impossible to ascertain how much is this increase in the contribution of Broad Street Station to the net profits of the Pennsylvania. The only basis on which its value could be written up upon the books of the company would be by comparing it with the value of real estate in the vicinity. This would result in an exaggeration of its value as a piece of property producing revenue for the Pennsylvania Railroad. The New York, New Haven & Hartford has a three fourths interest in the South Station, Boston, which cost $15,000,000 to build. The loss on the operation of this station, however, which is maintained largely for public convenience has been as high as $500,000 in a single year. As a piece of real estate this property is very valuable. As a piece of railroad property, however, it is a source of loss.

The only practical reason for increasing the value of rail-

road terminal property would be when it is desired to make this the basis for an issue of terminal bonds. In such a case, however, the lenders will make their own estimates as to the value of the real estate in question as security for the loan asked, and the corporation need not adopt the expedient of writing up the value of the property on its books. All things considered, the method of carrying the property of the company at its original cost, and maintaining that cost intact by proper rates of depreciation is best.

CHAPTER XVI

THE MANAGEMENT OF THE CORPORATE INCOME

Corporations exist and do business to produce dividends for their owners. A company which has no prospect of paying dividends should be either dissolved, or, according to methods which we shall have later occasion to explain, reorganized down to a dividend basis. After making the various deductions which have been indicated, the surplus profits belong to the stockholders, and if the company is successfully managed under conditions of ordinary good fortune, the stockholders will in time receive these surplus profits, directly or indirectly, either in the form of cash or dividends. A dividend is a payment of the profits of the company to its stockholders expressed in the form of a certain rate per cent on the par value of the stock. The dividend of the Pennsylvania Railroad Company is $3—six per cent on 8,021,296 shares, amount of capital stock $401,064,800; that of the United States Steel Corporation seven per cent on 3,602,811 shares of preferred stock, and $5 on 5,083,025 shares of common stock. The General Electric Company pays $8 per share on 651,674 shares; the Union Pacific Railroad Company pays $10 on 2,961,787 shares of common stock.

There are two steps in the process of distributing profits to stockholders: First, the directors by a formal resolution declare that profits have been earned. As a preliminary to the declaration of a dividend, the directors consider the following: (1) the cash or liquid assets of the company

at that time from which the dividends must be taken; (2) the prospect of business for the early future; (3) the ability of the company to obtain any funds which may be necessary for new construction by the sale of new stock or bonds. A company may be exceptionally prosperous without being able, on account of the rapid growth in its business which has locked up its cash assets in the form of accounts receivable, materials, etc., to pay out any portion of these profits in dividends. A declaration of a dividend, under these circumstances, could be made only by selling stock or notes to obtain the money, and while this is sometimes done, as a common practice it is to be avoided. Again, the business of the company, at the time when the matter of paying a dividend is considered, may be exceptionally prosperous, but the outlook for the future may be in doubt. At a time, for example, when a revision of the tariff is in progress, the companies whose earnings will be affected by any changes under consideration are inclined to husband their resources and prepare for a possible shrinkage in earnings. A company whose business is rapidly expanding may require large amounts of new capital. It may not be desirable to raise this money by increasing capital stock. Any money required must come out of profits. The directors, under such conditions, would be cautious in paying dividends.

The law provides that the declaration of dividends is optional with the directors. They have authority to fix the amount of working capital which, in their judgment, the business of the corporation requires, and until they declare a dividend by resolution, there is no way in which the stockholder, except by his vote to displace one or more directors, can control their action. The directors are the trustees for the stockholders. They are given full power to dispose of the funds of the corporation as their best judgment may direct. No matter how large are the profits of the company, there is no way in which they can be compelled to declare a dividend. The stockholders can only participate in profits through the channel provided by law. Various attempts have

been made to force a declaration of dividends, especially on preferred stock, on the ground that large profits had been earned, and that the stockholders were entitled to share in these profits. These attempts have been generally unsuccessful. The stockholder can invoke the aid of the courts to prevent the diversion of the company's funds to unlawful objects; he can restrain the officers and directors from paying to themselves exorbitant salaries; and he can prevent any improper use of the company's profits. As long, however, as the directors elect to leave the company's profits in the treasury, until they decide that a dividend shall be paid, the stockholder can obtain no share of these profits. His only remedy, in case he is dissatisfied with the management of the company, is to elect new directors or sell his stock and withdraw from the company. When a dividend has been declared, however, it becomes an obligation of the company, enforcable as any other debt.

The object which an honest and conservative board of directors set before them is to establish a dividend rate which can be maintained under all conditions of earnings. The interests of the stockholder and the corporation unite in the demand that a rate of dividend once established shall be maintained. The stockholder desires a stable dividend because the value of a stock whose dividends, for example, run six, six, two, two, and four, averaging four per cent for the five years, but irregularly distributed, will command a lower price than stock on which four per cent is paid every year. Investors, as distinct from speculators, although both elements are present in the minds of both purchasers of stock, desire stability in the income from their investments. The dividends which they receive go into their personal income accounts; their expenditures and appropriations are adjusted to these receipts; a reduction or the passing of a dividend disturbs their calculations and unsettles their confidence in the company. As a result of this preference of the investor for stocks with a regular rate of distribution, the payment of regular dividends produces a higher and more stable value

for such stocks. Stocks with regular dividends are worth more to sell and are also more valuable as collateral security.

A stable rate of dividend with its resulting higher and more permanent value is of great advantage to the company. Many corporations, especially those whose receipts are not evenly distributed throughout the year, have occasion to borrow money in anticipation of income to meet obligations which mature before that income is received. Wages, interest, and taxes must be paid and supplies purchased often before the proceeds of sales are received. In order that a corporation should retain a strong position with the banks, it is important that its stock should be maintained at a good figure. A high and sustained value for the stock of a company is ordinarily taken by the bank as evidence of its high credit. Of course, if this value is merely a recent marking up of stock-exchange quotations, it may not have much weight with the bank officers, but if it is a steadily maintained quotation, and represents what investors really regard as the value of the stock, the banker considers it good evidence of the financial standing of the company applying for a loan. On the other hand, the fact that a stock sells at a low price is usually a warning to the banker to discriminate against the paper of the corporation issuing the stock, unless the notes are well secured by indorsement or collateral.

A settled investment value for its securities, which can be obtained only by the stability of its dividend rate, also benefits the corporation because it makes it possible for it to procure money for improvements and extensions on favorable terms. A prosperous company is a growing company, and is under frequent necessity of selling stock or bonds to obtain new capital. The prices obtained for the new securities will depend to a large extent upon the prices of those already outstanding. If the company issues bonds, a high value for the stock indicates that the interest on these bonds is amply secured by surplus earnings. If, however, the stock is selling at a low figure, the investor knows that the company which proposes to increase its debt has little security to offer its

creditors aside from the property which the proceeds of the new bonds are to purchase. A low price of the stock indicates that the judgment of market observers is unfavorable to the company. The investor properly regards the past achievements of the corporation as the best assurances of its future prosperity. No matter how large the net earnings of a company may be at the time an increase of stock or bonds is made, the low market value of this stock resulting from an irregular dividend policy would be a warning to anyone investigating its credit that there was good reason for believing that these large earnings would not be permanent. Under these circumstances, it might be difficult to obtain high prices for these securities.

So important is an even distribution of corporate profits considered, that even when increasing earnings enable the corporation to raise the rate of dividend, care is usually taken to avoid any official statement, or even any implication from a statement, that the higher dividend rate is to be permanent. The method employed in such cases is to declare the "regular" dividend and then an "extra" dividend in addition. The increase is made in the form of the "extra" dividend as an intimation to the stockholder that the directors are not yet fully convinced that they can add the amount of the "extra" to the regular rate, and that they prefer to wait developments before establishing the regular rate at the higher figures. After the extra dividend has been paid for several years, and if profits are maintained, the rate will be made regular. In order to maintain an even rate of distribution on its stock, the directors of well-managed companies are governed by the following rules:

First, to pay no dividends for a considerable period after the company begins operation.

Second, to manage the expense accounts of the company in such a way as to reduce the fluctuations in surplus profits to the minimum.

Third, to pay out, in any one year, only a portion of these profits in dividends.

Every new corporation is, in some degree, an experiment. Even though it operates in an industry where the machinery, the methods of administration, and the product are standardized, and where the management have nothing more to do than to follow established models, the degree of its success cannot be accurately predicted. The number of unknown factors in every business situation is large; new laws to reduce profits, increases in taxation, unusual burdens imposed by the municipality in the way of public improvements, the incursions of competitors, changes in the tariff, dangers of industrial depression, encroachments of organized labor, substitutions of new products or the invention of machinery to produce at lower cost—these influences may enter to disappoint the calculations of the directors. Furthermore, in most public flotations, there is some overvaluation of the property purchased or constructed, and a corresponding element of inflation in the capitalization of the company. Even with the most painstaking care, mistakes of construction, location, or anticipation of demand may have been made. If the company is prosperous, these mistakes can be rectified, but the money with which these replacement and insurance funds are built up comes from the profits of the company. Conservative directors will, therefore, usually refuse to pay out profits until the company has demonstrated its ability to earn its fixed charges, and to produce a surplus out of which dividends can be paid.

The issue of cumulative preferred stock seriously interferes with a conservative management of the company's income. When dividends are carried over and accumulated to the prejudice of the common stockholder, fairness to him, as well as the usual necessity that a market should be made for new securities as quickly as possible, influences the directors to promptly begin the payment of dividends upon the preferred stock. In some cases, notably that of the United States Steel Corporation, the stock-market situation influenced the directors to immediately begin payment of dividends on the common stock as well as on the preferred. For

this, however, they were severely criticised. The position of the company during the early period of its existence was weakened by a policy of dividend payment which was generally believed to be unduly liberal. In December, 1903, the depressed condition of the steel trade led to the suspension of dividends on the common stock of the United States Steel Corporation. The directors quickly took advantage of the opportunity to adopt a conservative dividend policy. Although the depression in the steel trade was only temporary, conditions approaching normal in the following year, the policy of investing large sums in plant and equipment which the directors would probably have been glad to follow from the first, had stock-market considerations not proved controlling, was steadily adherred to. No dividends were paid on steel common until 1906, when a two-per-cent rate was established, raised a year later first to three and then to four per cent. Not until the autumn of 1909, was the rate advanced to five per cent. During this period from 1903 to 1909, the company earned $300,044,000 on its common stock and paid only $63,537,813 in dividends, the balance being invested in various reserves, and in building up a surplus on the balance sheet which, at the date of the last annual report, stood at $151,354,528. As a result of this policy of investing profits in improvements, instead of paying them out in dividends, the United States Steel Corporation has eliminated much of the "water" in its original capitalization, and has placed itself in a strong position.

In 1914, however, evidencing the continuance of a conservative policy, a sharp reduction in profits influenced the directors to suspend common stock dividends.

The later policy of the United States Steel Corporation in sacrificing its dividends to its surplus indicates the policy which every company whose financial situation permits should follow. In no other way can a corporation whose capital is excessive, and whose earning power is in any way doubtful, so certainly reach an investment position as by adherence to the policy of accumulating a large reserve out of income.

The more doubtful the success of the company, and the greater the number of dangers and risks to which it is subjected, the more important it is that dividends should be withheld until a strong financial position is attained.

Having fulfilled the initial requirement of accumulating an adequate reserve to offset the blunders of omission and commission which characterize the beginning of every new enterprise, the next problem confronting the directors of a company, anxious to place their stock upon a dividend paying basis, is the management of the expense accounts in such a manner as to reduce to a minimum the fluctuations in the income available for distribution to stockholders. A large part of the expense of operating any business varies with the volume of business done. An increase in the traffic of a railroad means more trains, and more employees to run the trains and to keep them in repair. A falling off in business results in a corresponding reduction in the cost of conducting transportation. The same is true of all other industries. The cost of operating the plant, as distinct from the cost of maintaining it, fluctuates with the amount of business done. There are, of course, in every business certain fixed expenses connected with the operation and selling which cannot be adjusted to changes in business, and which result in increased cost when earnings are reduced. Broadly speaking, however, the cost of running the plant, of manufacturing the goods, or transporting the freight and passengers, changes with the volume of business transacted. There is little opportunity, therefore, in the cost of operation, to adjust expenditure to fluctuations of income so as to minimize the changes in the balance of income available for distribution to stockholders.

In the maintenance and replacement items of operating expenses, however, a certain amount of adjustment and variation is possible. Maintenance charges, as we have seen, contain two items: the cost of up-keep and repairs, and the cost of betterments calculated to raise the standard of construction and decrease the cost of maintenance or operation. The

rule which governs the management of the first class of maintenance expenses is that, so far as possible, without damaging the credit of the company, standards of maintenance once established should be rigidly adherred to. Maintenance, in other words, should be a comparatively fixed expense, varying only as the influences which affect the wear and destruction of the property are modified.

Rigid adherence to this rule admits of a considerable amount of fluctuation in the amount of annual appropriations for the up-keep of the property. The cost of railway maintenance of way, for example, is increased by an open winter, which results in greater damage to the track and roadway. It is increased by the high cost of labor and material incident to business prosperity, and also by the heavy traffic which results from large production. Maintenance cost, on the other hand, is naturally reduced, without injury to the property, during periods of depression. When traffic is light, the wear upon the track is reduced, the amount paid out in wages is lessened. The efficiency of labor is also increased at such a time, not merely because of the greater desirability of steady employment during a dull season, which can only be secured at such a time by diligence and faithful service, but also because track work is not so much interfered with by passing trains. The cost of materials is also reduced during periods of depression. The maintenance of plant or equipment not directly affected by weather conditions can also be reduced during the period of depression without injury to the property. The Pennsylvania railroad, for example, made a heavy reduction in the cost of maintaining equipment during 1908, amounting to $6,864,247. This was due to the fact that a large portion of its equipment was not in service, and consequently was not subjected to the wear and tear of operation. A large amount of substitution of parts, such as air-brake hose, belting, etc., can be made during a dull season, when only a portion of the plant or equipment is in operation, thus reducing the cost of maintenance. A case in point is a factory manufacturing leather goods

which had four floors in operation during 1907. In 1908 business fell off so that only the machinery on the one floor was used. As fast as the belting wore out on the lower floor, belts were transferred from idle machines, where they would naturally deteriorate, and put into use. Such economies of maintenance do not involve any lowering of the standard of the plant, although the cost of maintenance may be greatly increased to restore the equipment used up in this manner when the entire plant again comes into operation.

With this exception, however, the safe rule to follow in maintaining the standard once established for a plant is that a "stitch in time saves nine." Neglect of maintenance, for any reason, is likely to be followed by the most serious consequences. The operating efficiency of a plant is so closely related to its physical condition, the success of its business is so dependent upon its efficiency of operation, that serious and permanent damage may be inflicted upon a company by failure to maintain the standards of its plant. A good illustration of the consequences of neglecting maintenance is furnished by the fifth annual report of the Kansas City Southern Railway Company for the fiscal year ending June 30, 1905. The capital stock of this company was originally vested in a voting trust for five years from April 1, 1900. This voting trust expired by limitation on April 1, 1905, when the stockholders came into possession of their property and elected a new board of directors.

They found the road in such a condition as to be practically unfit to carry on the business of transportation; twenty-five per cent of the engines were in bad order, sixty-five per cent of the freight equipment was unfit for use in the transportation of grain, merchandise and other freight demanding dry cars; fifty-five of the sixty-five per cent required heavy repairs, enough ties had not been renewed, ditches had not been cleaned, sufficient ballasting had not been done and sufficient rail had not been laid. The condition of the ties and wooden structures and track, as a result of the neglect of maintenance, was so bad that it was impossible to move

trains at ordinary speed. During the six months from January 7th to June 30, 1905, as a result of the impaired condition of the property due to the neglect of its maintenance, there were 715 wrecks and derailments reported, "each of which was of sufficient magnitude to require a special report and therefore cause serious loss and delay. Such a great number of accidents could not fail to cause serious loss of confidence and good will of the public and consequent diversion of traffic, also destruction and damage to property, delay to trains, and resulting wasteful expense for extra fuel and overtime of employees."[1] During the month of May, 1905, overtime paid engine and train crews amounted to $8,311.28, although the average of overtime for the three years preceding, before the property had reached its worst condition, was $5,990.88. In addition large amounts were paid each month for labor in rerailing cars and engines, and for repairing track and equipment, as a result of derailment due to defective tracks.' Large amounts were paid for loss and damage to freight due to such derailments. Finally, the company suffered severely in competition for business because of its inability to take all the traffic which might have been obtained, and also because the traffic which it did move was often seriously delayed in delivery and arrived in bad condition.

We see illustrated, in the case of the Kansas City Southern, the effect of the neglect of maintenance upon operating efficiency, and the effect of decreased operating efficiency upon traffic and earnings. While this is an extreme case, it illustrates a principle which is of invariable application. To allow a property to run down is to impair the property's efficiency and to inflict serious injury upon the operating company.

It is possible, however, and this is the practice of many corporations, especially those which have not yet reached a position where they can show large surpluses over the amount

[1] Fifth annual report of The Kansas City Southern Railway Company, fiscal year ended June 30, 1905.

required for their dividends, to vary their appropriations for maintenance according to their earnings, never allowing the condition of the property to deteriorate so far as to interfere with its efficiency, but postponing, on occasion, all but the most necessary replacements and repairs until earnings have improved. Such a policy may be justified by extreme financial necessity. When a reduction in the dividend of a company will impair the company's credit, or defeat the consummation of projects for raising large amounts of capital, the skimping of maintenance cost may be pardoned. A board of directors are always reluctant to reduce the dividend rate. Such action inflicts serious damage upon the stockholders, and is likely to lead to unforeseen criticisms. When companies are running on a narrow margin of earnings, their usual disposition, when conditions of reduced earnings are encountered, is to save at the expense of the plant. It is going too far to say that such a policy is never justifiable. Each case must be determined on its own merits, with reference to the peculiar circumstances in which the directors of the company find themselves. It is, however, well established that the policy of so-called "concentration" of maintenance expenses into years of large earnings is costly, in that it results in a higher average of expenses over a series of years in keeping the plant in condition, than would be necessary if fixed repairs were made.

This subject was investigated in 1908 by a committee of the American Street Railway Association. In their report they present the detailed figures of maintaining car bodies over ten years, first, when the car is put in the shop each year, and second, when it is shopped bi-yearly. The comparison of the cost of maintaining car bodies under the yearly and bi-yearly systems of shopping is shown in the table on the following page.

To the cost of the yearly maintenance over the ten years, should be added an estimated item of $44.40 on account of the additional equipment made necessary because of four days loss of time on each car while in the shop, and an item

Cost

Shopped Yearly		Shopped Bi-Yearly
1st year	$29.18	
2d "	61.49	$86.46
3d "	54.94	
4th "	60.99	97.46
5th "	60.44	
6th "	59.99	111.46
7th "	54.94	
8th "	67.74	115.96
9th "	55.44	
10th "	79.99	143.15
Total	$585.14	$554.45

of $10.40 on account of increased shoproom made necessary by the yearly maintenance, making a total of $639.85 as the cost of maintaining the cars when shopped yearly as compared with $554.45, the cost of bi-yearly repairs. This comparison, however, does not indicate the merits of the respective policies. The objects of car maintenance as stated by the committee are as follows:

First, to prevent accidents due to defective equipment.

Second, to prevent failure of service due to defective equipment.

Third, to prevent excessive depreciation of equipment.

Fourth, to maintain equipment comfortable and attractive to patrons and public.

The committee finds a marked saving under each one of these items as result of shopping the cars every year. First, less liability to accidents. "When a car is thoroughly overhauled each year, there is less liability of accidents due to defective flooring, straps, windows, door and seat mechanism than where such overhauling is done every second year. If such accident claims are made, the fact that the car had been carefully overhauled inside of a year would greatly improve the railway company's case in court, and it would seem that two cents per car per day would be a conservative

estimate of its value." The liability to failure in service was also decreased by frequent overhauling. The life of the car body is also increased when the cars are put into the shop every year. "Very few electric car bodies have been abandoned on account of deterioration. Many have been retired on account of being obsolete and unprofitable to operate. Therefore, the proper value for ordinary depreciation is hard to determine, but it is a well-known fact that where wood is exposed to moisture it will deteriorate rapidly, that paint and varnish will crack at joints if they are not kept well covered and the varnish elastic, and that floors and sills will rot if they are not kept well painted. Therefore, it is safe to estimate that the life of a car body which has received proper attention each year will be ten per cent greater than one receiving attention every second year.

This conclusion of the committee is abundantly borne out by examination of the detailed figures of maintenance of cars under the two systems, which are given in the report. For example, the item of general woodwork repairs and tightening up frames, under the system of yearly shopping, cost the company in the eighth year $15 and in the tenth year $15.50. When the car has been shopped bi-yearly, however, this item cost $45 for the eighth year and $60 for the tenth year. The cost of varnishing and cleaning and renovating upholstery and curtains is also much greater for the later years of the period than on cars which have been shopped yearly. The committee estimates that the life of a car body which has received attention every year is ten per cent greater than one receiving attention every second year.

There is also a great advantage in yearly maintenance of equipment in reduced cost of car cleaning and in greater attractiveness leading to an increase in revenue. "It will also be conceded," says the committee, "that a car which is kept well varnished can be kept clean with less labor than is the case where the luster is gone and the paint exposed. This would amount to at least ten per cent of the cost of

keeping the woodwork clean, but as it would not affect the sweeping, dusting and cleaning of glass, five per cent of the total car cleaning is taken as a fair value.

"A clean car excites pride in the car crews, tends to make them more attentive to their personal appearance, their work more pleasant, and, in consequence, they will render better service to the company. An attractive and comfortable car goes a long way toward making a satisfied passenger and a well-disposed public."

The committee estimates the gain under this head resulting from yearly maintenance at ten cents per car per day. The final comparison of the results of yearly and bi-yearly maintenance is presented in the following table of costs and credits:

Summary of Costs and Credits

	Cars Shopped Yearly		Cars Shopped Bi-yearly
	Costs	Credits	
Car body maintenance (for 10 years)	$585.14		
Interest, depreciation, taxes and insurance (for 10 years) on additional equipment on account of being in shops four days per year more than when shopped bi-yearly	44.40		
Interest, etc., on increased shop room	10.40		
Reduced liability of accidents for five years at two cents per day		$36.50	
Five per cent saving in cost of car cleaning for five years		84.65	
Value of car being more attractive and comfortable to passengers (at ten cents per day for five years)		182.50	
Decreased depreciation on longer life of car body (ten per cent.)		61.50	
Totals for ten years	$639.94	$365.15	$554.49
Average per year	63.99	36.51	55.44

The claim of regular maintenance could not be more clearly presented than in the final results of this comparison, showing an advantage of $27.96 for the method of yearly shopping. From every standpoint except that of immediate saving, the policy of postponing maintenance is to be condemned, not merely because of its effect upon the property maintained, but also because of the impaired operating efficiency which neglect of maintenance always brings in its train.

Having established our rules for the financing of maintenance, we have next to consider the financing of depreciation. Shall the depreciation charges be annually deducted from income as are maintenance charges and sinking funds, or shall the directors be given a certain amount of liberty in concentrating these charges upon years of large earnings? The various public service commissions which have passed rules on the subject and the Interstate Commerce Commission are inclined to the opinion that depreciation should be a fixed rule. The Wisconsin commission, for example, provides that:

> Every electric railway shall carry a proper and adequate depreciation reserve to cover the full replacement of all tangible capital in service. There shall be opened a depreciation account, to which shall be charged monthly, crediting the depreciation reserve, an amount equal to one twelfth of the estimated annual depreciation of the tangible capital in service of the railway, or as near that amount as the finances of the property will permit.

On the other hand, the practical view of this subject is expressed by Mr. Frank R. Ford, of Ford, Bacon & Davis, electrical railway engineers, in a paper presented at the midyear meeting of the American Street & Interurban Railway Association on January 28, 1910:

> The depreciation fund is essentially a financial problem, the solution of which is apparently by law left to the directors of the corporation as they are em-

> powered to determine the amount of current income to be set aside for working capital and the amount of dividends to be declared. It is questionable if utilities commissions can lawfully impose rules for the charging of depreciation in cases where the physical property is fairly maintained and securities properly issued. I believe that no hard and fast rule can be laid down for charging a fixed amount to such a fund month by month or year by year; the proper amount to be charged should be known, and if in lean years this amount is not laid aside, in prosperous years the deficiency should be made up. It might even be necessary to use this fund for other purposes than renewal of physical property, due to business contingencies unforeseen.

Mr. Ford's view may be indorsed since it conforms to the practice of corporations noted for their conservatism. Depreciation differs radically from maintenance, interest, and sinking fund charges in that the losses to provide for which depreciation funds are built up, are not regularly recurring. For example, a power plant may be assumed to remain in active service for fifteen to twenty years, and provision should be made for its replacement at the end of that period. It is not necessary, therefore, although the necessary funds must be available at the end of twenty years, that one twentieth of the amount should be provided in each year. The company can take advantage of years of large earnings to increase its appropriation for depreciation, and can make corresponding reductions in these charges when earnings are small. By adopting this policy, the company can maintain an average rate sufficient to provide for the depreciation of its assets, while it can distribute the annual appropriations so that they fall lightly in years of small earnings. The fluctuations in the surplus available for dividends are thus reduced to the minimum. The practice of the United States Steel Corporation in managing its depreciation follows the rule laid down by Mr. Ford. The following table gives the net profits of the company, the amounts set aside for depreciation and ex-

tinguishment, the payments out of this fund, and the balance remaining, for the first seven years of the corporation's history:

UNITED STATES STEEL CORPORATION AND SUBSIDIARY COMPANY

DEPRECIATION AND EXTINGUISHMENT, EXTRAORDINARY REPLACEMENT AND IMPROVEMENT

	Set Aside	Payment	Balances	Net Profits
1902	$24,150,325.04	$19,813,669.13	$18,273,801.49	$90,306,525
1903	23,897,353.36	24,937,033.95	17,568,222.39	55,416,653
1904	12,574,210.91	11,299,647.27	19,377,179.32	30,267,539
1905	21,665,063.04	16,109,701.72	26,792,216.37	68,585,492
1906	28,753,271.55	21,079,231.47	35,521,959.74	98,128,587
1907	28,025,124.41	26,995,540.51	38,038,842.56	104,565,564
1908	16,836,324.81	16,291,496.25	39,554,239.05	45,728,714
1909	24,447,673.00	14,739,939.79	50,630,279.45	79,073,695

An examination of this table shows that when the company's earnings are large, its appropriations for depreciation increase, and when earnings fall off, the depreciation allowances are reduced. The two years of smallest earnings for the corporation were 1904 and 1908. In 1904 the depreciation appropriations were reduced nearly fifty per cent, and in 1908 forty per cent. If the company had appropriated in 1904 and 1908 the average amount for the entire period, it could not have paid its full rates of dividend out of the surplus of these years. The table also shows how rapid is the accumulation in the depreciation reserve of the steel corporation owing to the fact that the payments out of these funds have as yet been small. In seven years the amount in these reserves has more than doubled. The company is accumulating large reserves against the day when it will be necessary for it to re-equip its plants.

CHAPTER XVII

FIXING THE PROPORTION OF PROFITS TO BE PAID OUT IN DIVIDENDS

The third rule or principle which we find to govern the dividend policy of well-managed companies is to pay out in cash dividends only a portion of the balance of income remaining in any year available for distribution to stockholders. Even after a large surplus has been accumulated to safeguard the dividend rate, and with the most careful management of the depreciation and renewal accounts, the amount of this "balance for dividends" is subject to wide fluctuations, which, in view of the desirability of maintaining a fixed rate of dividend, makes the distribution of the entire amount in any year unwise.

The earnings of a corporation are the resultant of three factors: (1) The volume of traffic or sales; (2) the rate or price at which the business is done; (3) the cost of operation or production. A steel manufacturing company, for example, buys coke, pig iron and limestone and converts these products first into iron, and then into steel rails by purchasing the services of a number of employees, and finally sells the product to the consumer. The formula for calculating the profits of this company is as follows: (Receipts from sales) — (cost of materials) + (wages, salaries and general expenses) + (interest, rentals and taxes) + (cost of materials, machinery for replacements and new construction charged to depreciation). A variation in any of the items of expenses, unless accompanied by corresponding variation of receipts, will result in a fluctuation of profits.

Stability of profits, under these circumstances, is an impossibility. The price of the product changes with the periodical fluctuations of demand. The growing power of organized labor as well as the inefficiency of labor when employment is plentiful, makes labor cost uncertain. New inventions and improvements may require the company to discard large amounts of machinery. Only the items of general expense and interest charges can be regarded as factors of expense which can be reckoned with certainty. On the other hand, the receipts from sales are even more uncertain. In September, 1907, for example, few anticipated that within three months the leading manufacturing plants of the country would be operating at one half of their normal capacity. The regular alternations of prosperity and depression, to say nothing of general breakdowns, such as befell the steel industry in 1908, or difficulties with organized labor, or advances of freight rates or tariff changes, any one of these uncertainties may come in to make a marked change, both in prices and the volume of sales. Here are two sets of profit variables, one disturbing calculations of expense, the other calculations of income. As a result of their interaction, every industry is subject to excessive variations of profits.

We may illustrate from reports of the Baltimore & Ohio. The gross earnings of this company increased from 67.6 millions in 1905 to 82.2 millions in 1907. Then came the panic and the depression, which reduced gross earnings to 73.6 millions. Operating expenses, from 1905 to 1907, increased only ten millions. As a result, the net earnings of the company, the difference between gross earnings and operating expenses, increased nearly five million dollars. On the other hand, from 1907 to 1908, operating expenses were hardly reduced at all, standing at fifty-four millions each year. Net earnings from operation of the Baltimore & Ohio declined from twenty-seven millions to nineteen millions, the exact amount of the decrease in gross earnings, in consequence.

These fluctuations in profits are even more serious in the case of industrial corporations. For example, the American Smelting & Refining Company reported gross earnings of 13.2 millions in 1907, and 9.4 millions in 1908, and the net earnings from operation of the United States Steel Corporation which were 161 millions in 1907 to which figure they had increased from 119.7 millions in 1905, suffered a decline of approximately forty per cent during 1908, falling to 91.8 millions. This fluctuation of profits is not the same for all industries, nor is the rate of change the same for every corporation in each industry. The distinction between industries, in respect to the relative stability of their profits, we shall have present occasion to examine. For the time being, it is sufficient to note that these profit fluctuations do exist, and that they must be reconciled with the necessity of paying the regular dividend.

In view of these irregular earnings, it is impossible for corporation directors to pay out all their earnings to stockholders without making dividends unstable and damaging the financial standing of the company. To reconcile the necessity for stable dividends with the fact of unstable profits, the directors must pay out only such a percentage of profits as will leave a margin over the dividend requirements, assuming profits to fall to the lowest point which, in all reasonable probability, will be reached. A corporation should ascertain from its own experience, and from the experience of other companies similarly situated, what are likely to be the lowest earnings under the most unfavorable circumstances which it is likely to encounter, and then fix its dividend rate well below that point. In order to maintain a stable rate of dividend, a corporation should have its maximum dividend requirement always fall below its smallest earnings. If the opposite policy is adopted, large dividends will be paid out of large profits, small dividends out of small profits, and the value of the stock, as already explained, will be low and uncertain.

Our next question concerns the percentage of profits

which directors, having regard to the desirability of a stable dividend rate, can safely pay out to stockholders. The determination of this proportion is a matter for the judgment of directors in each case to determine, having regard to the peculiar circumstances of their own company. There are, however, certain broad considerations on the basis of which a classification of companies, with reference to the proportion of surplus earnings which should be paid to stockholders, can be made.

The percentage of average profits which can safely be paid out to stockholders varies with the regularity of its profits. To illustrate: a corporation, the difference between whose maximum and minimum profits over a period of years is fifty per cent, should pay out only half the proportion of annual earnings which can be safely distributed by another corporation whose earnings fluctuate only twenty-five per cent.

The stability of the earnings of a corporation depends primarily upon the steadiness of the demand for the product or service which it supplies. In manufacturing industry, this stability of demand is greatest in those corporations which produce the necessaries of life, such as sugar, oil and flour, and it declines as the article becomes less indispensable to the consumer. The percentage of average earnings which a lace or glove manufacturing company, for example, can safely pay to its stockholders is far less than that which a sugar or oil company produces. The fluctuations in the demand for all goods used in production, including machinery and materials, are also great. Iron and steel products, for example, are purchased that the buyer may make a profit by using these commodities in further production. Such articles as lathe, steel rails and structural steel are usually bought by producers who expect to make a profit by using them or reselling them. The strength of the demand for iron and steel depends, therefore, upon the movement of profits.

As a general principle, rising prices always mean advanc-

ing profits to the industries concerned, and falling prices mean declining profits. The reason for this is that costs of production move more slowly than prices of the product, since they contain certain elements such as wages and interest, which change very slowly. Industries are, moreover, so closely joined together in the relations of producer and consumer that an increase in the prices and profits of one industry is quickly passed to the others. When the price of wheat, for example, is rising, the farmer's profits go up, and with them his demand for agricultural implements, barbed wire, and nails. When the price of wheat falls, these purchases are postponed to a more convenient season. Rising prices increase the volume of traffic, the earnings of the railroads, and the prices of their securities, enabling them to raise money for extensions and improvements, which improves the demand for a great variety of articles entering into the construction and equipment of railroads. On the other hand, when prices are falling, and the volume of business shrinks, railway earnings decline, the security market will take only high-grade bonds, and these only at low prices, the railroads have no margin in their earnings to make improvements, and their securities cannot be sold to advantage. It is then necessary to stop their extension and improvement work, and to curtail their expenditures for materials. The same influence determines the demand for the products of all the metal industries, and also the demand for such articles as coal and lumber which are purchased for profit and not for the personal consumption of the buyer. The demand for these articles fluctuates widely and often wildly, corresponding to the alternations of business prosperity and business depression. Industries which produce production goods, therefore, if properly managed, will be very conservative in their distribution of profits to stockholders.

There is a wide difference between the profits of railway transportation companies and manufacturing companies, the instability of whose profits we have just been considering. The demand for the products of a single industry is limited

to a small portion of the total number of commodities produced. The demand for railway transportation, on the other hand, is represented by every commodity of commerce. The demand for transportation corresponds to the supply of commodities. The broader is the demand for the products or service of an industry, the more stable are its earnings. A large and diversified demand is but slightly affected by any influence, but if this influence is left to operate by itself upon the price of a commodity or service, it produces wide fluctuations. The withdrawal of ten thousand gallons from a standpipe appreciably affects the level of water in the pipe. Withdraw the same amount from the reservoir, and the water level is scarcely affected. This analogy may be applied to explain the stability of the demand for railway transportation as compared with the demand for coal, sugar, or iron. The railroad company is patronized by the producers of every commodity. What it loses in freight earnings from a decline in price or supply of one group of products, is often more than regained by advances in others. The manufacturing company, on the other hand, by producing, at the most, only a small number of products, has usually less compensation for a decrease in demand. Its earnings usually, therefore, show a larger effect from a fall in prices.

The classified freight traffic of the Pennsylvania Railroad, for example, includes thirty-six general classes of freight, some of which comprise thousands of individual articles, and each one of which contributes to the $153,564,528 of gross earnings which the company earned in 1909. Each one of these commodities is acted on by a variety of influences which affect its demand or supply, and which, through these factors, influence the profits of its producers. The production of anthracite coal is reduced by a strike. As a result the demand for bituminous coal is increased. A failure of the corn crop reduces the profits of the farmer and rancher. A cut in duties decreases the profits of the manufacturer, and a change in internal revenue duties affects the profits of the grower and distiller. Prices and profits are in a state of con-

stant change. No manufacturing industry can be certain of its earnings a year hence.

From these disturbing influences, however, the railway company is, to a large extent, protected. The great variety of its traffic prevents rapid changes in the gross amount. What is lost on one commodity is often regained on another, and the total tonnage is not reduced. This is well illustrated by a comparison of the gross earnings of the Pennsylvania Railroad with those of the United States Steel Corporation. The one is the largest railroad system in the United States and one of the best managed, and the other is the largest and one of the best-managed and best-organized industrials. The steel corporation, moreover, manufactures a great variety of products, so that its demand would naturally be more stable than those of steel manufacturing companies whose profits are more narrowly specialized. It has also been able to maintain for long periods stable prices for most of its products, and its supremacy in the steel trade since its organization has only recently been challenged. Competition, until the winter of 1909, has very slightly disturbed it, and yet the fluctuation of its gross earnings, compared with the Pennsylvania Railroad, which appears in the following table, where the figures are stated in millions of dollars, is extreme. The figures for the Pennsylvania Railroad are as follows, stated in millions of dollars:

1902	112
1903	122
1904	118
1905	133
1906	148
1907	164
1908	136

and for the United States Steel Corporation as follows:

1902	500
1903	536
1904	444
1905	585
1906	696
1907	757
1908	482

The percentages of fluctuation from one year to another in the two companies are as follows:

	Pennsylvania Railroad.	United States Steel Corporation.
1902	15.15	.....
1903	8.93	7.20
1904	3.28	17.16
1905	12.71	31.76
1906	11.28	18.97
1907	10.81	8.76
1908	17.08	36.33

Broadly speaking, the distinction which has been indicated between railway and manufacturing industries holds good wherever it is applied. The demand for the transportation services offered by some railways, especially those which depend exclusively upon iron and steel or kindred industries, is more irregular than those of some manufacturing companies—for example, gas or electric lighting companies or companies supplying certain food products which are regarded as necessaries of life. But as between the two classes of corporations, railroads and industrials, the comparison of stability of demand favors the railroad, primarily because of the breadth of the demand for its products.

The distinction between transportation and manufacturing industry, on the basis of the respective stability of their profits, is explained, not merely by varying conditions of demand, but by their respective liability to competition. A business in which competition prevails is certain to be a business of fluctuating prices. When demand is slack, the sellers, in their struggle to keep their plants in operation and their organizations employed, give the buyer concession after concession, which he very well knows how to extract by playing one seller against another. Then, when business revives, the producer, who has usually lost money during the depression, takes immediate and full advantage of the opportunity to charge the highest price which the traffic will bear. These

high prices, as soon as the low-price contracts with which large consumers have protected themselves expire, lead to the curtailment of demand and to another outbreak of competition. When the steel industry, for example, was a competitive business, prices were highly irregular. In fact, for a long period there were no fixed prices on account of the rebates and discriminations; everything was uncertain, irregular, and unstable. Under such conditions profits were not only reduced in the aggregate, but their fluctuations were enormous. From 1901 to 1909, however, under the dominance of the United States Steel Corporation, which has controlled about sixty per cent of the production of finished material, and of whose power the smaller producers have stood in awe, stable prices have been maintained. The corporation has neither raised prices during periods of active demand—for example, in 1904, 1905, 1906, and 1907, when they could have materially advanced quotations—nor when business declined have they attempted the futile experiment of persuading the manufacturer half of whose plant is idle, or a railroad with one third of its equipment on the sidings, to invest large sums in steel products for extensions and improvements by making concessions in price. By maintaining prices they have earned a larger margin of profits on a reduced tonnage, and have protected their interest and preferred dividends.

From the influence of competition, the profits of the railway industry are almost fully protected. The railway company enjoys a natural monopoly. After the territory through which its lines pass has been fully settled, and the local donations of land and cash, upon which most American railways originally depended for their construction, have ceased, the building of competing lines becomes very difficult. An important deterrent to new railroad construction is the increasing cost of terminals. A recent illustration of this fact is the enormous expenditures of the Gould interests to put a line into Pittsburg, which it is claimed cost them $30,000,000, and which, because of their inability to connect with the lead-

ing industries of that city, and also because of the absence of an Eastern outlet which would enable them to compete for the bulk of the tonnage, has never been successful. Even where competition exists between the larger cities, the local traffic is generally free from this influence, and competition for through business, while effective in maintaining lower rates between competitive points, is nevertheless well regulated by uniform agreements, which are well observed, presumably because the decline of traffic during periods of depression is not so severe as to incite a struggle for existence between railroads, and also because all forms of secret rate cutting, rebating, and discriminations are now prohibited by a Federal criminal statute, which has been rigidly enforced in recent years.

A few years ago the attempt was made to permanently eliminate competition in the railway field by a system of community of interest by which one road purchased control, although not always a majority interest, in the stocks of its competitors. This system has been broken up by the enforcement of the Sherman Antitrust Law, but it lasted long enough to enforce upon the railroads the necessity of agreement upon rates. While railway competition, so far as it relates to speed and character of service, still exists, competition in rates has practically disappeared.

The elimination of competition from manufacturing industry, however, is exceedingly difficult. To return again to the United States Steel Corporation, which offered the best promise of accomplishing this result, we find that, during the winter of 1909, this attempt to control prices, although it was for the manifest interest of the trade, was completely broken down. The steel corporation at no time controlled two thirds of the steel production of the United States, but relied upon its control of raw materials and the influence which the dominant factor in the trade usually has upon the weaker members, to secure adherence to a policy of fixed prices. By uniting upon this policy, the small amount of business which was to be had was handled at remunerative

prices, and the profits of all steel producers were much larger than they would have been had they surrendered to the consumer at the outset of the depression. Little by little, however, under the pressure of necessity, the independents broke away from the agreement, and cut prices in order to secure a larger share of the limited business available than they would have obtained had they followed the policy of the steel corporation in maintaining prices. At last this price cutting was seen to threaten the steel corporation with the loss of most of its business for the coming year. In self-defense it was compelled to announce an open market for steel. With this declaration, a portion of the benefits of combination, so far as these relate to the control of prices, were surrendered to the consumer.

The failure of the attempt of the United States Steel Corporation to control prices, an attempt made under the most favorable auspices, with the strongest leadership, and apparently with the cordial coöperation of all members of the trade, shows that the maintenance of stable prices in the field of production goods, unless the ownership of an entire industry can be secured by one producer, is difficult. Single ownership the Federal and State laws, as at present interpreted, will not permit.

In the field of consumption goods, where commodities are purchased directly by the consumer, monopoly is even more difficult to secure. The concentration of manufacture under the control of large corporations has worked for a larger measure of stability than was possible when an industry was carried on by a large number of productive units, but combination has thus far done no more than to mitigate the severity of competition. It has not been able to do away with competition.

These general differences between industries, however, do no more than furnish the starting point for the determination of the percentage of profits which a given corporation can carry. Within each industry, a great diversity of conditions as to the strength of demand, costs of production, con-

trol of raw materials, location in reference to markets, and a variety of other considerations are encountered. The existence of these differences in conditions makes it impossible, without reference to the circumstances of the corporation in question, to determine the proportion of average profits which can safely be distributed to stockholders.

Even within the industry whose profits are more stable than any other, the business of railway transportation, we find wide differences between the stability of profits of different railroads. The New England railroads—for example, the New York, New Haven & Hartford and the Boston & Maine—have a large percentage of passenger traffic which fluctuates little, and a high-class traffic of manufacturing goods and merchandise, which produces a stable revenue. Industrial conditions in this territory are very stable. The people, as a community, are well-to-do, and the New England States are affected in a much smaller degree by an industrial depression than are many other communities. As a result of these conditions, the traffic and earnings of the New York, New Haven & Hartford and the Boston & Maine are subject to relatively slight fluctuations. Until these companies were forced by unwise management to suspend dividends in order to recuperate, they were able, with safety, to pay out much larger percentages of their relatively stable profits, than would have been safe for companies depending largely on coal or iron and steel traffic, or on grain and lumber traffic.

But while it is impossible, for the reasons stated, to indicate, as between different industries, the percentages of profits which can be safely distributed in dividends, we may answer the question as to the proper amount of earnings which should be reserved for the protection of the dividend rate by reference to the practice of the most conservative railway and industrial companies. The Pennsylvania Railroad, for example, on an average of many years, has made it a rule that for every dollar paid out in dividends another dollar shall be put into the property. The Chicago & Northwestern has distributed about three fourths of its profits; the Great

Northern, a somewhat smaller percentage. The earnings of the railway business, with the possible exception of public service corporations located in a few of the larger cities, are, as we have seen, more permanent and stable than those of any other leading industry. In fixing the percentage of reserve required for corporations operating in industries where the stability of profits is less than in the railway industry, it is safe to require at least as large a proportion as that reserved by the strongest railway companies, since the nature of the railway business renders the earnings of long-established railway companies far more stable than the profits of even those manufacturing companies which are most firmly intrenched in the control of raw materials and in a stable demand for their product.

On the basis of this principle, we may assume that no railroad company, outside of corporations so exceptionally situated as are the railroads in Southern New England, can safely pay out in dividends, on an average of ten years, more than three fourths of its profits, and that the percentage of cash distributed by industrial corporations should not be more than fifty per cent of the average profits. The implication of this rule is, of course, that during periods of large profits a much higher percentage than fifty per cent must be reserved for the stock. As a general proposition, a corporation which follows the rule of a dollar for the company and a dollar for the stockholder is on the way to an investment position for its stock. In cases where the industry is exposed to exceptionally wide fluctuations of profits even a larger percentage must be reserved. The balance reserved for the company is invested for its benefit, the accumulation of this annual investment raising the earning capacity of the company so that a higher dividend rate can eventually be paid. As the dividends increase, however, the surplus should also increase, both dividends and surplus, with ordinary good management, moving upward, and the stockholders profiting, not merely from the increase in dividends, but from their greater security in any rate of dividend once attained.

CHAPTER XVIII

THE METHODS OF DISTRIBUTING THE SURPLUS

WHAT now is the relation of this surplus appearing on the balance sheet to the rate of dividend? May it be drawn upon in case of emergency to make up a deficit in income? May it be distributed in large amounts as special dividends to stockholders, or can the stockholders hope for no greater benefit from this accumulation out of profits than their proportion of the addition which will be made to the income of the company as a result of the investment of its profits? In the majority of companies the only service which the surplus accumulated out of profits renders to the dividend rate is to increase the amount of annual profits, which furnishes the basis for the amount of dividends declared. It may, however, in some cases serve as a fund out of which deficits in the amount necessary to pay the regular dividend may be made up, either by direct withdrawal or by borrowing. The surplus may also, from time to time, be directly distributed to stockholders, in a lump sum, as a special dividend. These various methods of utilizing the surplus we have now to examine.

The surplus of a corporation may be used as a source of dividends to its stockholders, aside from its service in increasing the net earnings of the business, in the following ways: The company may, during a season of depression, draw down its surplus by reducing its cash working capital for the purpose of making up a temporary deficiency in revenue. It may accomplish the same result by negotiating a temporary loan, which will be returned out of the income of a later period of

the year. This method of borrowing money to meet dividends, when receipts are irregularly distributed throughout the year, is very common. It is a legitimate practice. If the revenues are in sight, a bank will lend money to a corporation to anticipate those revenues, no matter if the proceeds of the loan are to be immediately distributed to the stockholders in the form of a dividend.

The second method of distributing surplus directly to the stockholders is employed when a company may have acquired in the course of its business certain assets with which it can readily dispense, such, for example, as coal-mining or express companies, or land companies. The stocks representing these concerns may be held in the treasury of the parent company, and the dividends received on these stocks may be added to the other income of the parent company, and merged into its general surplus available for distribution. In case it is expedient or convenient for the corporation to divest itself of the control of these properties, the stocks or bonds issued by the subsidiary companies may be distributed to the stockholders of the parent company as a special dividend.

An illustration of this method is furnished by the distribution of the Great Northern Ore Certificates to the stockholders of the Great Northern Railway Company. Certain iron-ore lands in Minnesota had been acquired in the interest of the Great Northern Railway by Mr. James J. Hill, then its president, and his associates. These properties, aggregating about 60,000 acres, were located in the Missabe district of Minnesota. They were controlled by the corporation known as the Lake Superior Company, Ltd., controlled by the Great Northern Railway. The properties were transferred in the autumn of 1906 to Mr. James J. Hill, Louis W. Hill, and E. T. Nichols, as trustees, and 1,500,000 shares of permanent beneficial interest in the trust were issued in December, 1906, to the Great Northern stockholders. In August, 1906, a lease was executed to the Great Western Mining Company, guaranteed by the United States Steel Corporation, covering 39,295 acres of this land. The Great Western

Mining Company agreed to extract 750,000 tons of ore in 1907, with an increase of 750,000 tons annually, until a maximum annual extraction of 8,250,000 tons was reached in 1917. The least fixed the net royalty for each ton of ore delivered at the dock by the Great Northern at $.85, and, after deducting eighty cents per ton as freight to the railroad company for transporting the ore, the balance is distributed to the holders of trust certificates at least once a year. These certificates were immediately distributed by the trustees to the Great Northern stockholders as a special dividend. This lease has since been terminated.

It has long been the policy of the Great Northern to keep its dividend at seven per cent. Had these ore certificates been placed and held in its treasury and added to the regular dividends, this rate would have been exceeded. The lease protected the railway company in the transportation of the ore to be mined under the lease. It could, therefore, without danger of losing control of this traffic, distribute the certificates of beneficial interest in the lease as a special dividend to the stockholders. This would have been a direct distribution of its surplus by the Great Northern Railroad Company.

A portion of the surplus may be put into a dividend reserve fund, withdrawn from the working capital of the business, and so invested that it cannot be drawn upon without impairing the efficiency of the corporation. Unless the dividend reserve fund is so built up, the assets of the company cannot be directly utilized to make up a deficiency in earnings. A railroad company, for example, has invested its surplus in equipment, or in improvements to its line, or in securities of corporations. It also carries a certain cash balance. It cannot sell any of these properties or assets without impairing its efficiency. The investment of surplus funds in the business of the corporation merges and identifies them with the general assets of the company, which are used for its general corporate purposes, and which, unless the stockholder decides to wind up its affairs and to pay its debts and divide the balance, are not available for distribution. If, however,

a company adopts the policy of maintaining a dividend reserve fund, it may utilize its surplus directly to make up deficiencies in revenue.

When a dividend reserve fund is established, an amount is withdrawn each year from the working capital of the business, and invested in securities which are held merely as investments, and which do not represent the control of the properties necessary to the business of the company. In a year of small profits, a portion of these securities can be sold, or they can be hypothecated for a loan, and the regular dividend can thus be paid. This plan is in effect the averaging of payments out of surplus over a period of years—the same principle as that followed by many companies in insuring their own plants.

An illustration is furnished by the Cunard Company, which, over the twenty years ending 1902, out of £4,650,380 of profits earned, paid only 18.8 per cent to the owners of the company and added 81.2 per cent to the various reserves which the company maintained. A large amount of this money withheld from the stockholders was invested in good securities, and during four bad years, from 1892 to 1895, these reserves were drawn upon for dividends. Of the £64,000 which was paid out to stockholders during these years, £55,000 came from the reserves. The maintenance of a dividend reserve fund is justifiable for corporations, such as ocean transportation companies, whose profits are subject to wide fluctuations. As a general proposition, however, the maintenance of these funds cannot be approved. The reason is the same as that which can be urged against maintenance of sinking funds—the fact that money invested in securities can earn at the best 4½ or 5 per cent, while if invested in the business its earnings are much larger. A growing company has always need of new capital to expand its business, and save in exceptional cases such as the one just described, it is bad policy to maintain any portion of its surplus in a form from which it can be directly distributed to the stockholders. It is better that the annual reservations from profits

should be merged into the general assets of the company, since in this way they will contribute to the increase of its profits and property.

With the exception of the three methods described—temporary reduction of working capital, distribution of assets for which the corporation has no further use, and payment of dividends out of a dividend reserve fund—direct distribution of the accumulations of the surplus of a corporation, is not possible. The surplus has become an integral part of the property of the company, merged into general assets, increasing in time the annual profits in which stockholders participate, but not available as a fund of assets for immediate distribution to stockholders. The company cannot sell any part of its plant to pay a dividend or dispose of any securities held in order to control corporations which these securities represent, nor impair its working capital, to make a distribution to stockholders. The distribution of the surplus must usually be made, if at all, by increasing liabilities rather than by reducing assets, by the indirect rather than the direct method.

We have described the surplus as the difference between assets and liabilities, which appears on the liability side of the balance sheet. This surplus can be reduced, not distributed, either by reducing the assets or by increasing liabilities. In either case, the difference between assets and liabilities is reduced, and if the corporation issues stock or bonds directly to stockholders, or sells these securities and pays out the proceeds as special dividends, it may, without impairing its general assets or crippling in any way the efficiency of its plant, distribute its surplus to its stockholders.

An ordinary method of financing current requirements for new construction is to spend upon the property the amount available for a dividend, paying the dividend not in cash but in stock or scrip redeemable in stock. Cluett, Peabody & Company are carrying out an extensive plan of providing new capital by this method, which is merely a sale of stock to stockholders at par. No objection can be made to this practice so long as the amount of stock paid

out does not exceed the cash dividend which could safely be paid at the time.

Corporations occasionally, however, go much further than this, and capitalize the accumulations of many years by a special dividend in stock or bonds, or in cash raised by the sale of securities. A celebrated illustration of this method of distributing surplus is furnished by the action of the Chicago & Alton Railroad Company in 1899 in paying out to its stockholders a portion of its surplus, amounting to $12,444,777, which during previous years, it was claimed, had been taken from earnings and expended for additions and permanent improvements, but in the first instance had been charged upon the books of the company to current expenditures. The funds for this payment were obtained by a sale of bonds. This transaction attracted little attention at the time, but some years later was subjected to severe criticism.

The explanation and justification of this transaction by Mr. Paul D. Cravath, of counsel for the company, is as follows:

> All agree that the expenditures in question were for capital account. That the Company had during the previous years devoted at least $12,444,177 of its profits to capital expenditures no one questions, and that these expenditures might have been charged from year to year to Capital Account and carried to Surplus is equally clear. The witness Hilliard, the present Comptroller of the Company, testified: "I have not any doubt that they might have been fairly so charged at the time." Mr. Blackstone, the President of the Company, in his annual report of 1894 stated that the capitalization of the Company, including its bonds and all obligations assumed by it, aggregated less than sixty per cent of the actual cost of the property in its present impaired condition, and that a dividend of eight per cent is, therefore, the equivalent of about 4¾ per cent upon such a number of shares as would, together with the funded debt, represent the actual cost of the property. The readjustment of accounts was entirely proper and is sustained by highest accounting

authority. After these expenditures for Capital Account had from year to year been charged to Current Expense, the Board of Directors could properly and lawfully readjust the accounts and transfer these expenditures to Capital Account, thus correspondingly increasing the Company's surplus. It is respectfully submitted that notwithstanding the opinion of the witness Hilliard to the contrary, there is not the slightest doubt about the legality and propriety of such procedure. This procedure is amply supported by the decisions of the courts. A case precisely in point is Mills vs. Northern Ry., &c., Co.[1] In that case a railroad company had for a considerable period pursued the practice of charging the cost of certain locomotives and other rolling stock to Revenue, but, finally, in order to increase the surplus available for distribution among the stockholders by way of dividends, the directors proposed to readjust the accounts and transfer these expenditures from Income Account to Capital Account, and to distribute by way of dividend among stockholders part of the surplus thus created. Against this procedure the plaintiff made precisely the objection which Mr. Hilliard has made against the similar procedure adopted by the Chicago & Alton Railroad Company, but the High Court of Appeal overruled the objection and said: "I have no hesitation in saying that the circumstance that they had been paying what ought to be charged to capital out of revenue does not prevent their right or their duty to the persons who are looking for their payment out of revenue to credit back to revenue those things which have been carried for the time to capital account." The use of $6,669,180 of the proceeds of the sale of the $32,000,000 of three per cent bonds to pay a dividend of thirty per cent upon the stock of the Chicago & Alton Railroad Company, against the Company's surplus, most of which was the result of the readjustment of accounts discussed in the preceding paragraph. A company having a surplus may lawfully use the proceeds of bonds as a dividend fund.

As a readjustment of accounts and the carrying of

[1] Chancery Appeals, 621 (1870).

past capital expenditures to surplus were lawful, so it was equally lawful to pay out $6,669,180 of that surplus by way of a thirty per cent dividend upon the stock. The proposition that money can be borrowed for the paying of dividends (assuming that the books of the corporation show a sufficient surplus) is amply supported by the authorities.

In 2 Cook on Corporations,[1] Section 546, it is said: "When the company has used profits for improvements, it may lawfully borrow an equivalent sum of money for the purpose of a dividend. And it may properly borrow money to pay a dividend if, upon a fair estimate of its assets and liabilities, it has assets in excess of its liabilities and capital stock equal to the amount of the proposed dividend." It is difficult to see how the legality of the dividend can be questioned. It is, therefore, only necessary to discuss its propriety. The propriety of a dividend to represent the earnings invested in permanent improvements is recognized by the Blackstone management.

In declaring this dividend the new management simply carried out the purpose of the old management as publicly declared in the circular quoted above, except that the dividend was paid in cash and represented only a part of the earnings invested in permanent improvements, while, apparently, the purpose of the prior management had been to issue a stock dividend to represent all the earnings theretofore invested in such improvements.

As President Blackstone pointed out in his annual report of 1894, such large amounts of earnings had been expended upon permanent improvements that the Company's securities outstanding, taken at their par value, represented "less than sixty per cent of the actual cost of the property . . ." and while dividends had been paid at the rate of eight per cent upon the par value of the stock, the rate upon the investment which the stock represented—that is, upon the actual cost of the property—was only 4¾ per cent. That, of course, is the chief reason why the common stock of the Company was worth the price of $175 a share

[1] Fifth Edition.

> which the Syndicate paid for it. What possible impropriety, therefore, could there be in the stockholders deciding that their investment in the stock should be reduced by the payment of a thirty per cent dividend, funds for that dividend to be furnished by the sale of low interest-bearing bonds? The distribution of a stock dividend under such circumstances is exceedingly common. It is equally proper to pay out a cash dividend and issue a reasonable amount of low interest-bearing bonds for the purpose of producing the cash for that dividend. This was not a case where a bare majority of the stockholders were forcing their will upon an unwilling minority, for practically all of the stockholders joined in the declaration of the dividend, and all of the stockholders without exception shared in the distribution of the dividend.

In the case which Mr. Cravath describes, the company issued bonds for cash and used a portion of the cash to pay the special dividend on the stock. The legality of this proceeding, unless specifically prohibited by statute, as it is in some States—for example, New York—is not to be questioned. The surplus could also be distributed by an issue of bonds direct to stockholders, or by an issue of stock, or a scrip dividend could be declared, redeemable either in cash or stock at some future time. All of these methods have been employed from time to time by various classes of corporations to distribute their surplus.

The expediency of this practice may be considered from two standpoints. The distribution of the surplus by some scheme of recapitalization involving an increase of liabilities without corresponding increase in assets, and the turning over to the stockholders of either bonds or stock or the proceeds of the sale of securities, as a special dividend, can be justified only if the surplus so distributed is a real surplus. It is not sufficient that the company should, from time to time, have reserved large sums out of earnings and invested these in the improvement of its property. These improvements should have actually added to the permanent earnings

of the company. The issue of stock or bonds under these circumstances means an increase in the fixed charges of the company, or in its dividend requirements. Unless the investment of profits in improvements has produced the requisite increase in earnings, or unless the increase in earnings, no matter whence derived, has been actually accomplished, a capitalization of the surplus appearing on the balance sheet is without justification. Aside from financial expediency, it is wiser for a corporation which has no surplus, but whose earnings are large enough to pay dividends out of the proceeds of stock and bond sales to increase its interest or dividend payments, than for another corporation whose earnings are stationary or declining, but which has a large surplus accumulated out of earnings standing as a liability on its balance sheet. Instances abound where corporations have shown for many years large surplus accounts along with declining earnings. An excellent illustration of the disappearance of a book surplus is furnished by the history of the Baltimore & Ohio.

This company, under the administration of the Garretts, until 1880, had been extraordinarily prosperous. Its financial position was strong; it paid large dividends and earned a comfortable margin over these dividends. Its capital stock was small, under $20,000,000, and its funded debt was about $30,000,000, showing a total capitalization of only $35,400 a mile. Furthermore, this was always cited as the best evidence of its impregnable position that its books showed a surplus of $47,703,798, representing the accumulations of investment out of earnings, after paying ten per cent dividends for many years. The friends of the company claimed that, with a capitalization of only $50,000,000 and with a surplus of $47,000,000, the company really had no liabilities, and was at all times in a position to call in its bonds and stock. The Baltimore & Ohio, at this time, in the early eighties, was considered to be the strongest railway corporation in the United States. If the company had chosen to double its capital stock in order to capitalize a portion of its surplus,

the transaction could not have been attacked either on the ground of expediency or legality.

Within ten years from 1886, however, the company was dragged into bankruptcy. It embarked in a policy of aggression directed against the Pennsylvania Railroad and the New York Central, and it incurred heavy liabilities for new construction. The result was that, while its fixed charges increased, its earnings were reduced. In 1883 and 1884, the Baltimore & Ohio had earned a surplus over dividends of $2,000,000. By 1887 this had fallen to less than $40,000, a large floating debt had been accumulated, and in 1888 a thorough reorganization was arranged for. In connection with this reorganization, the surplus appearing on the books of the company, and which was discovered to have been invested in forms which were no longer productive, was scaled down from $48,000,000 to $23,000,000. In reality, the surplus which the Baltimore & Ohio had been carrying for many years was no more than an accumulation in a depreciation account. The money had been spent upon the property, and the property had, notwithstanding, been allowed to fall below the standard of efficiency maintained by its rivals, the Pennsylvania Railroad and the New York Central. Within a few years after this reorganization, in 1896, the company went into the hands of a receiver. Its equipment was found to be in a wretched condition, the entire property needed reconstruction; the paper surplus had disappeared.

The same criticism can be directed against the directors of the Alton. The surplus which they capitalized and distributed was fictitious. This company connects Chicago, St. Louis, and Kansas City. In 1898 it had only a small capitalization, as indicated in the quotations from President Blackstone's reports. Its earnings for many years had been stationary, but it was regarded as a strong property. A syndicate, represented by Mr. Harriman, Mr. James Stillman, and Mr. Mortimer Schiff, set out to acquire the property for the purpose of recapitalizing it and making a quick profit. The method which they followed was to organize a

competing company and to start the construction of a line paralleling the Alton from St. Louis to Chicago.

The Alton stockholders were greatly disturbed by these developments. The net earnings of the Alton were not increasing. The stockholders could gain no comfort from the large paper surplus which the books of the company showed, because the standard of efficiency of their property was not up to that of its competitors. The standards of construction were those of fifteen years before. The track was laid with steel rails, but those were only seventy pounds to the yard. The bridges were in good condition, but were too light for heavy engines. The capacity of the sidings and second tracks was inadequate to handle large increase in traffic. A circular sent out by a majority of the directors urging the sale of the stock to the syndicate at $175 a share contains the following statement: "The Chicago & Alton Railroad is without connections, either east or west, under its corporate control. At important points competition already existing and threatened, with the general tendency to reduced rates of transportation and to increased rates of taxation, it becomes more and more difficult for the road to continue the earnings of the past." It is evident that the directors had no confidence that the surplus accumulated out of earnings would be of any great service to the company in meeting competition.

The condition of the Alton was far below that of its competitors. This is proven by another quotation from the statement of Mr. Cravath explaining why the company failed to pay a dividend on the $20,000,000 of common stock, an issue which was made against an anticipated increase of earnings: "The failure of the Chicago & Alton Company to make the expected earnings for the common stock is due mainly to two causes: first, it took over $19,000,000 to modernize and fully equip the property, instead of about $6,000,000, as had been originally estimated; and, second, while the new management succeeded in promptly increasing the gross revenue of the company, the increase in net earnings was very slight, be-

cause of unexpected reductions in rates, which, in the case of freight rates, seem to have averaged about thirty per cent."

Here is a frank admission by counsel for the syndicate which conducted the reorganization of the Alton, that the company had not maintained a sufficient depreciation account, that its property had not been kept up to standard, and that it was necessary to borrow large sums of money to reconstruct it. Under the circumstances, the payment of this special dividend was wholly unwarranted, since it represented the capitalization of a surplus, which, if proper depreciation had been made, would have figured rather as a deficit.

We may conclude, therefore, upon this point, that great caution should be exercised in the recapitalization of a company for the purpose of distributing a surplus to stockholders. While such a distribution may not be prohibited by the laws of the state incorporating the company, and while it may be justified as a deferred payment of profits, unless the surplus has been correctly calculated by deducting the proper maintenance and depreciation charges, the company is very likely to find itself in the position of the Baltimore & Ohio, with a large paper surplus and a receiver in charge of the property.

The propriety of distributing a surplus by a process of capitalization may be also considered in comparison with the method which is followed by most corporations, and which has already been indicated, of investing profits in the business, increasing the earnings as a result of this investment of profits, and eventually adding to the dividend rate. If the stockholders are content to wait, and if the surplus earnings of the company have been wisely invested, they will in time receive the benefit of these dividends in the form of a larger return on their investment and a higher value of their stock. This method is far more conservative than that which was followed in the case of the Alton. In reality it makes little difference to the stockholder who holds the hundred shares of stock on which $5 a share is being paid, whether he receives from the company twenty shares of stock as a

special dividend to capitalize surplus, or whether he receives out of the earnings of the company an extra dollar of dividend. In the first case, since the regular dividend is presumably to be maintained, he receives the existing rate of five per cent on 120 shares of stock, or $600 a year. In the second case he receives the same amount expressed as a six per cent dividend on 100 shares of stock, or $600 per year. In case he wishes to sell his new stock, he could probably take a larger profit in the appreciation of the market value of his holdings; the value of twenty shares of stock paying five per cent dividends would be greater than the addition to the value of his 100 shares by the increase of one per cent in the dividend rate. This consideration is, however, insufficient to outweigh the argument that the most conservative policy, in the majority of cases, is the wisest. The most conservative policy for a corporation, in distributing its surplus to stockholders, is to increase dividends whenever earnings warrant rather than to issue stocks or bonds for which no value is received. These may represent merely the capitalization of a surplus which is unlikely to be offset by assets producing a sufficient revenue to warrant the increase in capitalization.

CHAPTER XIX

THE PROVISION OF NEW CAPITAL

EVERY prosperous corporation is continually adding to its plant in order to increase its profits. The extent of these additions to plant may be seen by comparison of the item "cost of plant" in the case of a number of our leading corporations over a period of years. Such a comparison appears in the following table:

	1900	1907
Pennsylvania Railroad........	$125,789,918.95	$291,061,204.00
Baltimore & Ohio............	125,969,036.90	165,066,928.00
Chicago, Milwaukee & St. Paul.	218,302,680.50	259,148,727.00
Union Pacific................	130,520,818.00	373,951,998.00
General Electric..............	3,400,002.00	9,000,000.00
United States Steel Corporation 1901	1,232,585,197.10	1,435,540,068.00
Republic Iron & Steel Co.......	41,142,251.00	53,592,166.00

Taking all the railroads of the United States, we find that their cost of road and equipment increased from 1900 to 1907, inclusive, $2,879,800,000. Every prosperous corporation, whether the fact appears in its balance sheet or not, has followed a similar line of development. Its productive assets are steadily growing, more rapidly during some periods than at others, but increasing to some extent in every year of its existence.

The distinction between an expenditure which should be charged to operating expense, and an expenditure which should be charged to capital and appear as an increase in

some asset account, is found in the fact that an expenditure, to be properly capitalized, should result in a certain and approximately definite increase in the profits of the company, an increase which is more than sufficient to pay interest or dividends, at the rate paid by the company on its existing liabilities, on the amount necessary to make the improvement. From the class of expenditures which can be properly capitalized, on the basis of this definition, the so-called betterment expenditures should be excluded. While betterments may result in decreasing the operating expenses of a company, the amount of the increase is usually uncertain, and, as has already been shown, the necessities of competition and the demands of the public and of the consumer for improved service and better products, make it prudent and even necessary for a well-managed company to charge into their current operating expenses large amounts representing the cost of raising their property to higher standards. An expenditure is capitalized when it is added to some asset account, appearing also on the liability side of the balance sheet either as an addition to stocks, bonds, unfunded debt, surplus, or some one of the reserves which may be carried. Capitalized expenditures should result in positive additions to the business of the company. The construction, for example, of a new mill, or the purchase of railway equipment, or the construction of lines into new territory, are examples of expenditures which could be properly capitalized. On the other hand, under ordinary conditions, such expenditures as the substitution of heavy rail for light rail, the rebuilding of locomotives, the elevation of tracks to increase the speed and safety of passenger traffic, the improvement of passenger stations, the substitution for out-of-date machine tools of new shop equipment, are properly betterments, and their cost should be clearly segregated in the asset accounts.

The influence which is most effective in forcing a corporation into the policy of expanding its plant is the necessity of guarding against the encroachment of competitors by occupying the territory bordering the business on which

these competitors would thrive. If the demand for its products or services increases, the corporation must enlarge its facilities to supply the demand; if it does not, and competitors are permitted to occupy the new territory without a struggle, there is danger that they may follow up this conquest by an approach to closer quarters. A forcible illustration of the reasons for providing additional capital funds is given in a circular letter of the president of the Central Union (Bell) Telephone Company to the stockholders in 1901, at the time when the Bell company was embarking on its policy of expansion:

"After two months' investigation I find it imperatively necessary that at least $3,000,000 be provided without delay. The people of the states of Illinois, Indiana, Ohio, and Iowa want telephone service. Will you supply it, or must some one else? Are you doing it with fewer than 70,000 stations? No. When you have 300,000 exchange stations, then you have a good start, not before. When you have 150,000 exchange stations, at proper rates, you will have a plant upon which you can earn something with which to build up the second 150,000. With your present 70,000 stations, you cannot build up anything except opposition. You are not satisfying the public, because your system does not reach far enough. There are scores of villages and small towns, taken as a whole, that should have 50,000 telephones, and in which the company has not one single instrument. What you want done must be done now. Later on, and a very little later at that, will be too late."

A recent illustration of the truth of the observations contained in this circular came under the writer's observation in Hammonton, N. J., a town of about 4,000 people. The Bell Telephone Company had exclusive possession of the field; there were only about twenty-five stations in the town; the instruments were antiquated, the service wretched, the rates high. Since the Bell company showed no disposition to im-

prove matters, the citizens of the town organized a company, raised $20,000, and installed an exchange, which now serves 300 subscribers and which furnishes a considerable amount of long-distance business to the competitor of the Bell company. The Bell company could easily have had these 300 subscribers if they had shown proper enterprise. As it is, the business of this community is practically lost to them.

Closely allied to considerations of necessity are the considerations of financial advantage which are offered to every prosperous corporation in the enlargement of its plant or the extension of its control over other corporations. These advantages are as follows: First, the restriction or regulation of competition, by which rates or prices may be increased; second, the enlargement and improvement of the plant to handle increasing business at a lower cost; third, the expenditure of money to develop the territory and to enlarge the sales of the company. The policy of the Pennsylvania Railroad since 1900 furnishes illustrations of the realization of each of these advantages by a progressive corporation. In 1900 the capital liabilities of the Pennsylvania Railroad increased $72,838,475; in 1901, $31,379,637; in 1902, $52,829,284; in 1903, $125,973,000—a total increase of $283,020,396 in the assets of the company within four years. This was followed in 1904, 1905, and 1906 by further increases of $136,217,897. The money which the Pennsylvania Railroad received and spent from 1900 to 1906 was sufficient to build and fully equip, at $60,000 per mile, a trunk line railway of 6,987 miles in extent. It is an amount far greater than the capital liabilities of most of the larger railroad companies in the United States.

When this increase of the Pennsylvania's capital is analyzed, and when the purposes to which the funds were applied are understood, this large increase of capital is seen to have been not merely warranted by the earning power of the company's property, but imperatively demanded by the competitive situation in the trunk line territory and by the growth of the traffic which was pressing for immediate shipment.

The purposes for which the funds obtained by this increase of capital were devoted were three: (1) the purchase of a dominant interest in the stocks of the Baltimore & Ohio, the Norfolk & Western, the Chesapeake & Ohio, the Western New York & Pennsylvania, and the Long Island railroads; (2) the improvement and enlargement of the physical property of the Pennsylvania Railroad Company; (3) the building of extensive terminal improvements in New York City, involving the construction of a tunnel passing under Manhattan Island and connecting New Jersey with Long Island, and a large passenger station on Manhattan Island.

The inauguration of the policy of purchasing securities of competing lines was foreshadowed in the report of 1899:

"While the growth of your traffic and its successful movement are subjects for congratulation, your board has to report a further reduction in the average ton mile rate. For years, the compensation of the trunk lines for moving freight traffic has steadily decreased. As may be supposed, railway managers have not seen this reduction without serious concern, or without making strenuous efforts to check the downward movement. These efforts have met with but little success. Had the railway companies not been able to meet the diminution in the ton mile rate by a corresponding reduction in expenses, disastrous results must have followed. But there is a limit, and it cannot be far off, to the possible lessening of the cost of movement. The only alternative is to arrest the reduction in revenue, which has been largely brought about by apparently uncontrollable conflicts between the railway companies, and between rival communities. The problems involved are not incapable of solution, and it is believed that by earnest and united effort the difficulties in the way may be met and overcome. With this end in view, it has seemed wise to your board to acquire an interest in some of the railways reaching the seaboard and to unite with the other shareholders who control these properties in supporting a conservative policy. This will, it is hoped,

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result in securing reasonable and stable rates and do away with unjust discrimination."

These observations of President Cassatt referred to the inauguration of a program of purchasing stock interests in competing lines which was carried on until the Pennsylvania had acquired a dominant, although not a majority, stock interest in its three southern competitors in the soft coal traffic, and was able to influence their policy. Beneficial results were immediately apparent. Soft coal rates, which had been utterly demoralized, and in which the grossest and most burdensome discriminations had long existed, were immediately advanced to a profitable basis, and imposed upon all shippers alike. The most important item of the Pennsylvania traffic, in which there had hitherto been small profit, was turned into a valuable source of revenue. Although in the succeeding four years the freight traffic of the Pennsylvania increased only 9,625,000 tons, or 9.6 per cent, the gross earnings from freight traffic increased from $51,395,733 to $73,899,939, a conclusive proof of the beneficial results of the application of the principle of community of interest to the solution of the problem of soft coal rates with which the Pennsylvania was confronted in 1899. The profitableness of the freight traffic of the Pennsylvania during this period increased nearly five times as rapidly as the amount of the tonnage moved. These investments in the stocks of the bituminous coal carriers were profitable, not because of dividends received by the corporation which did not quite equal the interest paid on the purchase money obligations, but because of the higher rates on coal which these purchases, representing control of competing lines, made possible, and which amounted to considerably more than the interest on the bonds. Since the passage of the Hepburn Law in 1906, the Pennsylvania Railroad Company has disposed of a large part of these securities and has definitely abandoned the attempt to influence its competitors by a large representation on their directorates. The necessity for these holdings no longer existed owing to the

disappearance of the distrust and uneasiness which formerly characterized the relations of the trunk line executives. Furthermore, the Interstate Commerce law has now been so strengthened that secret rate cutting is a thing of the past. It should be remarked that the Pennsylvania Railroad, in addition to the dividends which it received on the stocks of the soft coal carriers, made a profit of over thirteen million dollars on such of them as it sold.[1]

The second object of the Pennsylvania's expansion of its capital during this period was the improvement of its physical property. The equivalent of a double track railroad has been built from New York to Pittsburg and equipped with rolling stock and yard and terminal facilities. As a result of this expenditure the company now has a four-track road between Pittsburg and Philadelphia, and six tracks between Harrisburg and New York. By making large expenditures on equipment the company has also increased the tractive power of its locomotives and the capacity of its freight cars. Large sums have also been spent upon supplementary improvements, such as stations, expansion of yards and track elevation, all of which increased the capacity of the road.

In the face of enormous expenditures, and in spite of the notable gains in operating efficiency which they brought about, the facilities of the Pennsylvania proved inadequate to the demands of this period. As President Cassatt remarked in his report for 1902:

"The remarkable development of business, particularly in the sections served by your lines, created a demand for transportation which could not be supplied. For, although the traffic carried over the roads comprising your system east and west of Pittsburg aggregated nearly 270,000,000 tons, being an increase of 26,000,000 tons, or more than ten per cent over the previous year, the necessities of the industries dependent upon your lines demanded a much larger

[1] In 1909 a large interest in the Norfolk & Western was acquired by the Pennsylvania, whose control of the company is again effective.

movement. The inability to accommodate these industries was due mainly to lack of track and yard facilities. It has been the policy of your management for years past to continually increase these facilities so as to keep them up to the demands of the traffic; but although heavier expenditures have been made for this purpose since the beginning of the present period of business activity than ever before in the same time, the exceptional growth of the tonnage has outstripped the facilities that it was practicable to create."

Primarily as a result of these large expenditures, resulting in an increase of capacity of its plant, the tonnage carried by the Pennsylvania increased from 133,433,845 tons in 1902 to 223,810,040 tons in 1907, an increase of 90,376,195 tons, which represented the total tonnage of the entire system twenty-one years before. Without this expenditure, this traffic could not have been handled, and the increase in operating earnings from 1902 to 1907, which amounted to $32,051,552, could not have been realized.

The final field of the Pennsylvania Railroad's expansion policy was the New York terminal project. This will require, when completed, an expenditure of about $150,000,000. The traffic situation in New York is peculiar. The total area of Manhattan Island, excluding Central Park, is 20.6 square miles. Upon this small spot of ground is concentrated a population exceeding 2,000,000. In the census year of 1900, New York had a population of 89,805 to the square mile, as compared with 9,951 for Philadelphia, 13,044 for Boston, and 8,939 for Chicago. These figures indicate the extreme congestion of population which is due to the fact that the city is located upon an island. If communication with the surrounding country could be established, the population would spread into the suburbs, a movement similar to that which has followed the growth of other large cities. To the resident of New York, however, immigration to the suburbs is denied. East, on Long Island, are large territories, almost unoccupied, offering desirable places of residence, but from

these opportunities of suburban residence the resident of Manhattan is cut off by the barrier of the East River. If easy communication with Long Island were to be established, there could be no doubt that a vast exodus of population from Manhattan would result. As the matter stood, however, the large number of hardy commuters who were willing to run chances of missed boats and trains is a small fraction of the number who will move into the suburbs when these obstacles are eliminated.

This task of eliminating the river problem from the transportation situation in New York has been left for the Pennsylvania Railroad to undertake. The Interborough Company and the Hudson companies, which have also carried tunnel projects to completion, followed the lead of the Pennsylvania. The Pennsylvania Railroad has completed two tunnels between New Jersey and its new terminal at Thirty-fourth Street and Seventh Avenue, and four tunnels from this point to its Long Island terminal at Long Island City. These tunnel improvements will bring Manhattan into immediate connection with the mainland and with Long Island, and will result in a large migration from Manhattan Island to places of more desirable residence. In Long Island particularly, the largest and most desirable residential territory which is tributary to any city in the United States, will be opened by these improvements, which will practically insure, within the next decade, an immense population throughout the eastern part of the island.

The advantages of these improvements to the Pennsylvania lies in the fact that this corporation owns a majority of the stock of the Long Island Railroad Company which controls the Long Island territory. It is true that the connection with the mainland will increase the share of the Pennsylvania in the competitive passenger business to the south and west, making the Pennsylvania route quite as convenient as the New York Central from its Forty-second Street terminal. It will also develop the passenger business between Washington and New York, already largely controlled by the Pennsyl-

vania, and will throw to the Pennsylvania lines a large part of the through passenger business which originates in Brooklyn and along the lines of the Long Island Railroad.

These gains are, however, unimportant compared with the opportunities offered by the development of Long Island territory. In Long Island, the terminal improvements will build up a large and permanent suburban traffic for the Long Island Railroad. With the completion of the tunnel project, the Long Island Railroad Company will be able to carry passengers from Thirty-fourth Street thirty miles into the country in less time than the Manhattan Elevated Railroad now requires to take them from the Battery to 125th Street, offering them, moreover, not merely a quicker passage, but a more comfortable journey.

Of far greater importance, however, than the increase of passenger business which will follow the completion of the tunnel project, is the growth in the freight traffic. The receipts from freight traffic on the Long Island have been far below the returns from passenger traffic. This company has been mainly dependent upon summer resort travel. It usually fails to earn its interest charges during the winter months. On the New Haven & Hartford, on the other hand, the returns from freight and passenger traffic are about equal. The reason for this discrepancy in the division of receipts is that Long Island, up to the present time, has been practically vacant territory. Only in the summer is its population large. In 1900 its entire population, outside of Brooklyn, was only 286,000. With Long Island brought into communication with the mainland, the shifting of population, it is expected, will build up a large city in the eastern part of the island. This population will not only demand a large amount of merchandise for direct consumption, but the development of a variety of manufacturing interests will follow its growth. All these developments mean, moreover, a large amount of freight over the Long Island Railroad, and will give the Pennsylvania a long haul for a large amount of traffic.

New capital may also be required in the form of cash and cash assets as working funds to handle an increased amount of business. If a company makes large additions to its plant, or if the business of its existing plant shows a considerable increase, in case it does not make corresponding additions to its working capital, it is quickly forced to become a heavy borrower, and while this position causes little inconvenience when rates of interest are low and money easily obtained, should a financial stringency occur, bankruptcy may be the result. Even under ordinary conditions, an inadequate working capital may be the cause of heavy expense to the corporation. The experience of the Pressed Steel Car Company is in point. The report of the president for the year ending December 31, 1901, contains the following:

"Since the incorporation of the company the profits have aggregated $4,312,285. Out of these profits has been paid $2,625,000 in dividends. The McKees Rocks plant cost $1,581,580, and additions and improvements to original plants, amounting to $555,702, have been taken out of the initial working capital and earnings. From this it will be seen that the actual cash working capital has been somewhat encroached upon, but the plants and capacity have been more than doubled, and the monthly production increased from $1,000,000 to upward of $2,000,000, the full operation of the plants.

"It is necessary to carry between $4,000,000 and $5,000,000 worth of material on hand, and for this purpose the company has been compelled to be an extensive borrower. During the year it was thought prudent to fund this indebtedness. Therefore, a mortgage for $5,000,000 was made to secure five per cent notes maturing at the rate of $500,000 each year, with the right to anticipate payment of all or part. These notes have been disposed of on terms advantageous to the company. By this means the company secures extra working capital, and its interest charges are limited to not to exceed $250,000 the first year, and $25,000 less every

year thereafter. There was disbursed last year for interest and borrowed money $215,821, which was charged off to operating expenses, and we believe that more than the difference appearing between this amount and $250,000 can be saved in extra discounts on materials purchased."

The Pressed Steel Car Company, in funding its large floating debt, not only made the economies indicated in the president's statement, but also removed a serious danger of financial embarrassment which might have resulted from failure to renew these loans. The receivership of the Westinghouse Electric & Manufacturing Company, in 1907, was due, in large part, to inadequate working capital, and to the efforts of the company to supply this deficiency by contracting heavy bank loans, and by piling up large obligations to merchandise creditors. Working capital is properly regarded, not merely as essential to the safety and prosperity of a company, but as perhaps the most profitable part of its equipment for business. It enables the company to carry large bank balances on the strength of which, with the company's good credit, heavy loans can be made on occasion, to take advantage of favorable opportunities for the purchase of materials and to discount bills, while, at the same time, it makes unnecessary the resort to the banks for more than temporary and occasional accommodation.

New capital may be finally required for the reconstruction of a plant where a profitable business has been sacrificed because the physical condition of the property has been neglected. A case in point is that of the Kansas City Southern Railway Company when taken over by the new management. Here was a road operating in a territory rich in traffic possibilities, and carrying a sufficient amount of traffic to pay its interest charges, in spite of its impaired physical condition. It was estimated that, to put the property in a suitable condition for handling present and prospective traffic, and to expand the business of the company to its proper proportions, the following expenditures would be necessary:

Repairs and improvements to track	$2,983,856.00
Reinforcements and reconstruction of bridges	510,000.00
Repairs and improvements to equipment	540,000.00
New tracks	388,000.00
New freight depot facilities	125,000.00
New water stations	65,000.00
New shop facilities	435,000.00
New telegraph	34,000.00
New fencing	180,000.00
Work at Port Arthur, Texas	50,000.00
New equipment	1,604,749.50
Total	$6,915,605.50

Practically all of these expenditures, with the exception of the equipment purchases, should have been spread over a period of years, and charged to operating expenses, not to capital. Over $5,000,000 of the amount which was deemed necessary to be spent on the property represented deferred charges to maintenance and betterments. The company should not, in a narrow view of the situation, have received any capital for the reconstruction of its plant, but should have devoted its surplus income to the purpose. Under the conditions confronting the management, however, there was no surplus income. At the same time, the expenditure of this large amount of money, no matter how provided, would put the company into position to make large earnings. Said President Edson:

"Your officers are convinced that with the improvements and additions which have been set forth, which will require two or three years to complete, and which will enable the road to handle expeditiously and economically all traffic which may be offered, the gross earnings will show an increase of from twenty to twenty-five per cent over the gross earnings for the year ending June 30, 1905, and that, with the economies which the additional facilities will make possible, the ratio of operating expenses, including taxes, to gross earnings, will not exceed seventy per cent.

"Taking as a basis the minimum of twenty per cent increase in gross earnings, the following results may be confidently expected under existing commercial conditions:

Gross earnings	$8,272,387.54
Operating expenses and taxes	5,790,671.28
Net earnings	2,481,716.26
Interest on bonds owned	32,501.00
Total income	$2,514,217.26
Interest on bonds	[1] 900,000.00
Net annual surplus from income	$1,614,217.26

From which must be paid, of course, the interest on such funds as may be borrowed for improvement.

"From this it seems certain that, unless overtaken by some unforeseen and general commercial disaster, the earning capacity of the property amply justified the capitalization of the amount necessary for improvements and extensions."

The surplus for the period to which this report refers was only $610,191.80. This income was in danger of disappearing, owing to the inability of the company to handle the business offered. The expenditure of approximately $7,000,000 would show earnings of 14.28 per cent on this amount. The conclusion that the cost of rehabilitating the Kansas City Southern Railway Company should be defrayed out of new capital provided for the purpose, and charged to the capital, instead of to operating expenses or depreciation, was evidently correct. Acting upon this advice, the stockholders authorized an issue of $10,000,000 4½ per cent second mortgage bonds, pledging them as collateral for $5,100,000 negotiable gold notes. Most of the proceeds were spent in making good the omissions of the past for the sake of obtaining the profits of the future.

[1] Not all deductions are given.

CHAPTER XX

THE METHODS OF PROVIDING NEW CAPITAL

OUR next inquiry is concerning the methods by which the necessary extension of plant and enlargement of corporate power and influence is to be accomplished. A company may either raise money to be invested in the improvement and extension of its plant, or it may acquire interests in other corporations which possess the necessary assets. These interests it may acquire either directly by the exchange of securities, or through the medium of a holding company, or by selling its own securities to the investor, expending the proceeds upon the securities desired, or by some form of lease of the desired property, or by a working agreement by which the use of the desired facilities is obtained. The first plan is the direct method of providing capital out of income or by the sale of securities; and the second, the indirect provision of capital by various methods which come under the head of consolidation.

Capital funds may be directly provided for the corporation by one or more of the following methods: (1) The money required may be appropriated out of profits; (2) stock may be issued; (3) the corporation may borrow money either on short time notes or by the sale of long term bonds. In Chapter XVII we have discussed the necessity that a properly managed corporation should never pay out all its earnings to stockholders. Conservatism demands that a certain balance should be reserved and invested in the business. The purpose of this reservation is to make sure that a dividend rate, once established, may be maintained. The

investment of these funds reserved from earnings, if wisely made, will increase the earnings of the company, and should appear as additions to its assets.

There is much to be said in favor of a policy of making extensions out of profits. A growth which is made out of earnings, without increase of stock or debt, is a natural growth; it is made gradually and cautiously, and therefore safely. The histories of the largest business concerns in the country show that even the largest possibilities can be reached by the investment of profits in the extension of plant. The growth of the Carnegie Steel Company from an insignificant beginning to the gigantic size it had attained when it was taken over by the United States Steel Corporation, is an illustration of the possibilities of the investment of profits. The growth of the Baldwin Locomotive Works, and of John Wanamaker's, and Marshall Field's retail establishments are familiar illustrations of the same fact. Indeed, most large business enterprises in this country which are still controlled by partnerships or private corporations, represent growth out of profits.

If directors follow a conservative policy in the administration of the income account of their company, they will make large investments out of revenues in working capital, plant and equipment. They will raise the standard of the property by betterment appropriations, charged either to additions or, preferably, to maintenance. They should also maintain a number of reserves for depreciation and renewal of plant, for bad debts, for insurance, for the extinguishment of the loss sustained by the sale of bonds at a discount, if this loss is not to be taken in the year in which it occurs. They may be required to set aside out of their income a sinking fund appropriation, and it may be provided that the amount of the sinking fund appropriation can be invested in the plant. Finally, in order to maintain an even rate of dividends, the directors are obliged to reserve a portion of each year's profits, which is also put into the business, and which, in time, may amount to a large sum. Shall the

directors go farther than these requirements of safety and stability in reserving profits from stockholders? Shall they treat the profits as their first resource when in need of money, and comfort the stockholders, as did C. P. Huntington, who, on one occasion, remarked to the stockholders of the Pacific Mail Steamship Company, that it made no difference whether they received their dividends in money or in ships? Their dividends were only deferred.

It is improper for the directors of a public corporation to pursue this policy. The company has applied to the investor to furnish funds for their enterprise. The money has been contributed with the understanding that if profits were earned they would be distributed in dividends, so far as a distribution could safely be made. Beyond the maintenance of proper reserves, and the investment of surplus earnings over a conservative dividend rate, the directors of a public corporation cannot, as a rule, therefore, with entire good faith to their stockholders, withhold profits for investment in plant. If the business is profitable, and demands new capital, the stockholders have the right to demand that the capitalization of the company shall be increased in order to obtain this new capital, and that they shall not be kept out of their dividends for an indefinite period in order that a so-called conservative policy should be pursued. If the company needs new money, the stockholders are usually quite willing to furnish it, in case they have been liberally treated, and fairly dealt with.

There are other objections to the plan of exclusive dependence on profits as a source of capital funds. Profits are very irregular, and it is difficult to carry out a consistent plan of improvement while depending solely upon the business to furnish the funds for these improvements. Furthermore, the exigencies of the corporate situation sometimes demand that extensive schemes of improvement should be put through within a short time; for example, the extension of the Chicago, Milwaukee & St. Paul to the Pacific Coast; the construction of the Western Pacific from Salt Lake City

to San Francisco; and the New York Terminal improvements of the Pennsylvania. Such gigantic works of construction may in some cases be provided out of earnings; for example, the new plant of the United States Steel Corporation at Gary has been built out of profits. As a rule, however, earnings are not sufficient for extensive additions.

Assuming a definite opportunity for the profitable investment of capital, it is to the interest of stockholders that this opportunity should be developed with the greatest expedition, and that the construction work should be carried through within the shortest possible time. If the improvement is to depend solely upon earnings for its completion, it may be unduly prolonged if the earnings are not forthcoming. The profits of the company over a period of years may be much less than if stock had been sold or money borrowed, and the work crowded through as rapidly as possible to the point of producing revenue.

The withholding of dividends from stockholders at the instance of the majority control also creates a bad impression, since it is often alleged, under these circumstances, that the majority interests who usually occupy important and lucrative positions in the service of the company, and who are not infrequently in the receipt of secondary and indirect emoluments as a result of their positions are unfairly discriminating against the minority stockholders. It may be charged that they are, in effect, pursuing a policy which, while increasing the value of the company's property, is depreciating the value of the stock which represents the ownership of the corporation owning the property. Such charges were forcibly made against the Southern Pacific management in 1903 by Mr. James R. Keene, who alleged that the Southern Pacific revenues were not only being withheld from the stockholders of that company, but that they were being devoted to improvements for the benefit of the Union Pacific which owned nearly half the stock of the Southern Pacific. Although the interests back of this attempt to force dividends on Southern Pacific stock were

discredited because of their obvious connection with a large speculative pool operating for an advance in the stock, based on the alleged promise of a dividend, yet their contentions attracted wide attention, and brought out unfavorable criticism against the directors.

Especial conservatism in the distribution of profits is usually desirable during the early stages of an enterprise, a large part of whose stock, as we have already seen, is usually issued against anticipated earnings. With these exceptions, however, it seems best that a public corporation should not rely mainly upon its earnings to obtain funds for extensions and improvements, but when it has reached a position of assured strength and standing, it should take advantage of that position to provide funds for the enlargement of its plant by the expansion of its capital, allowing its stockholders to share in its profits, so far as the distribution of these profits is consistent with the maintenance of a regular rate of dividend.

In view of the rapidly increasing number of persons in the United States who rely upon dividends for a portion of their income, it will be profitable for us to examine in detail a case in which this policy of exclusive reliance upon income for betterments was followed for a number of years by a prominent and prosperous railroad, the Lehigh Valley Railroad Company.

A railroad balance sheet presents a statement of assets and liabilities. By comparing one balance sheet with another the progress of the road in assets and earning power can be noted. From the movement of the liabilities, the sources from which funds were obtained can be determined. A series of annual balance sheets, therefore, contains the record of progress or deterioration, the financial history of the corporation. When we examine the balance sheets of the Lehigh Valley from 1898 to 1902, however, we find, apparently, that for five years the company stood still. The principal items of the condensed balance sheet for the two years mentioned are as follows:

	Assets	
	1898	1902
Cost of road	$18,639,291.95	$18,639,291.95
Cost of equipment	19,018,419.98	19,018,419.98
Securities owned	32,949,322.14	39,300,209.80

The only change is an increase of $6,350,887.66 in the securities owned, accounted for by the acquisition of the stock of the Lehigh Valley Terminal Company. As might be expected, since the valuation of assets did not change, the liabilities remained unaltered. The stock remained at $40,441,100 and the bonds decreased from $45,642,000 to $41,900,000. A singular spectacle was presented by the balance sheets, a company whose accounts showed neither growth nor decline.

Turning from this spectacle of stagnation to examine the income account of the company, we find a record of growth and prosperity. Gross earnings from operation increased twenty-five per cent in five years. The revenue tonnage of the road gained 150 per cent, while the mileage remained at about 1,400 miles. Unless the rates received suffered a severe decline, or unless operating expenses considerably increased, the net income of the company over these five years should show a considerable increase. So far from decreasing, the ton mile revenue of the Lehigh Valley increased from 0.500 cents to 0.554 cents. Furthermore, not merely did the rate received for transporting each ton of freight increase, but the expense of moving the tonnage declined, and the total earnings per train mile increased from $1.58 in 1898 to $2.09 in 1902. From those figures of earnings and expenses, a considerable increase in income available for distribution to creditors and stockholders might be expected. On the contrary, the gross income of the Lehigh Valley, which in 1898, a year of depression in the traffic and earnings of this section, was $6,799,255, in 1900 was $3,939,-

155, and in 1901, when no strike was in progress, was only $6,871,010. In short, the stockholders, who had received no dividends since 1893, were puzzled to understand why their company could be at the same time prosperous and unfortunate, why it could be making so much money and have nothing left for dividend payments to its stockholders, many of whom were sorely distressed because of the suspension of dividends.

Reserving for the present the explanation of this anomaly, let us compare the results of 1903 with those of 1902, the last year of the administration which took over the management of the road in 1897, and resigned it in November, 1902. On June 30, 1903, the total income available for distribution was stated to be $8,279,248, an increase of $3,628,120 over the statement of the preceding year. Evidently, a sudden and radical change in accounting methods had taken place which, after allowing for a million and a quarter of dollars spent in improving the property, showed net income available for dividends of two million dollars, or five per cent on the stock. More strictly interpreted, the accounts of the Lehigh Valley for 1903 show a surplus available for distribution of 8.1 per cent on the stock, as compared with a deficit of more than a million and a quarter in 1902, an apparent gain of $4,606,485 in surplus, although gross earnings increased only $2,734,535.

We have here presented the outlines of a noteworthy chapter in railway financial history, which raises a question of deep interest to railway investors. How far should the cost of improvements which increase the earnings of a company be taken out of earnings, and how far should their cost be defrayed by the issue of new capital? In other words, how far can a corporation, in justice to its stockholders, by refusing to issue new capital, keep its stockholders out of their dividends?

Immediately after the retirement of Mr. Wilbur from the presidency and the election of Mr. Walter, the directors of the Lehigh Valley inaugurated a policy which, for con-

servatism and extreme caution in the disbursement of profits, has rarely been equaled. In his report for the following year the new president stated:

"The policy of the present management has been, and for some time to come must continue to be, in the line of liberal, and perhaps unusual, expenditures on both roadbed and equipment, in order to adapt the property to the most economical operation. Substantially all the business of the company is competitive * * * * * * and rates are steadily and rapidly declining. To derive any profit from them the railway must be so improved in its characteristics as to be able to work much more cheaply than ever before. The companies with which the Lehigh Valley Railroad is in competition (New York Central and the Lackawanna) have been adapting themselves to like requirements for many years, but the Lehigh Valley Railroad, having done less in these respects until recently, must now proceed with greater activity."

In another report Mr. Walter explained the limited capital resources of the company, authority existing for the annual issue of only $1,000,000 of bonds. No application was made, however, for any increase of this authority.

The plant of the Lehigh Valley needed substantial improvement. There was no doubt of that. Both engines and cars were light and had to be replaced. Sidings had to be lengthened and bridges strengthened to admit of longer and heavier trains being handled. The repair shops had to be concentrated; the terminals enlarged and improved, and many additional replacements of way and structure were required.

The reconstruction of the system required a large amount of money and Mr. Walter proceeded to take this out of earnings and to charge it to operating expense. For many years the operating ratio of the road had been high, owing, in part at least, to inefficient management and inferior equipment. In 1894 the ratio was 76.86 per cent of gross earn-

ings, from which it declined steadily to 70.16 per cent in 1898. From this point, the ratio advanced to 80.97, an enormous and almost unprecedented figure, in 1902. More significant than the increase in the general operation ratio, was the change in the relations between its component parts. In 1895, under the old régime, only 22.56 per cent of the total operating expense was represented by maintenance of way and structure. In 1902, this proportion had increased to 40.31 per cent. All this time the efficiency of the system, as represented in its average train load, was steadily increasing from 383.87 tons in 1898 to 466.83 tons in 1902, a larger train load than even the New York Central could show. This increased efficiency of operation was the result of the reconstruction of the property. The entire cost of these replacements and repairs was charged to operating expenses. From 1898 to 1902, if we allow sixty-five per cent as the normal operating ratio, the Lehigh Valley, under Mr. Walter's management, spent almost thirteen million dollars, which, under different circumstances, would have been available for interest and dividends.

We can now answer the question which was raised concerning the legitimacy of the policy pursued by the former management of the Lehigh Valley. Looking at the matter from the standpoint of the physical condition of the property, a very plausible defense can be made for charging the cost of its rehabilitation to operating expense. If all expenses which result in raising a railroad toward the standard set by its competitors are to be classed as operating expenses, no criticism can be made. The physical condition of the New York Central was apparently taken as the goal of the Lehigh Valley's ambition. Only when the Lehigh Valley had been rebuilt on the Central's model, were the stockholders to get anything. Looked at as a problem in comparative operating efficiency, Mr. Walter's method of solution can be approved, the more so because he succeeded in his attempt.

When we consider the matter from the standpoint of the

Lehigh Valley stockholders, however, the severe criticism to which the management was subjected is seen to be not without some measure of justification. There can be no question that if the difficulties in the way of issuing new capital had been got over, and these difficulties were by no means insuperable, the company could have borrowed far more than the amount which was reserved from earnings, and could have effected the necessary improvements within a short time, instead of protracting them over a series of years at the expense of their stockholders. It is equally certain that if this policy had been adopted, a substantial dividend could have been paid since 1899, while the physical efficiency of the property would have been fully as great as it is at present. Questions of railway policy, such as this, are not to be judged by reference to abstract canons of finance, but in the light of known conditions and with due reference to the rights of stockholders.

CHAPTER XXI

THE ISSUE OF STOCK

ASSUMING now that funds are to be raised for extensions by the sale of securities, the first question concerns the class of securities to be sold. Shall the corporation increase its stock or shall it borrow the money needed?

The capital stock of a company represents its ownership. This ownership is divided into shares. An increase of the amount of stock, therefore, increases the number of owners. If there is to be only one kind of stock, the shareholders have two alternatives when it is proposed to increase the capital. They may take the new stock themselves, in which case their respective shares of participation in the company's profits remain unchanged, or they may offer it for general subscription. If a corporation has $10,000,000 of capital and proposes to add $1,000,000, each stockholder of record would have the right, under the law, to participate in the increase, if the stock was to be sold for money, and not exchanged for some form of property. The holder of one hundred shares of stock, for example, would be allowed to subscribe to ten shares of the new stock, which would give him the same proportion of interest in the corporation that he had before. It frequently happens, however, that existing stockholders do not care to take the entire issue. Stock must then be sold to outsiders, who are admitted to participation in the earnings, and to share in the control of the company on equal terms with the existing stockholders.

To the controlling interest of the company, the admission of new stockholders is often a matter of great concern.

New stock coming upon the market may be absorbed by those who desire to wrest control from those who now hold it. And if, as usually happens, the control represents no more than a strong minority, this may be the outcome of an increase in the capital stock. A celebrated instance of this result is the ousting of Mr. August Belmont and his associates from the directorate of the Louisville & Nashville in 1902. Early in that year the directors of the Louisville & Nashville, in order to finance some extensions, authorized the sale of 50,000 shares of stock. Under the rule of the New York Stock Exchange, shares are not deliverable on contracts until thirty days after they have been issued. Funds were needed immediately, however, and in order to obtain them the chairman, Mr. Belmont, was instructed by the Board to sell 50,000 shares "short"—that is to say, he sold stock which he did not own, borrowed the stock to deliver what he had sold, and expected to take up the loan out of the new shares when these should have become deliverable. At the same time, however, unknown to the Belmont interests, a syndicate, headed by Mr. John W. Gates, was engaged in a campaign to purchase control of the company, and, in the course of their operations, they developed a short interest estimated at 120,000 shares, including the 50,000 shares sold by Mr. Belmont.

The directors of the Louisville & Nashville had, in other words, sold more shares than they owned, and they could obtain the stock to make their deliveries only from the syndicate whose advantage it was to bring about this situation. On April 14, 1902, it was discovered that a corner existed in Louisville & Nashville; the price of stock on this date touched 133 and a repetition of the May panic of 1901, which was brought about by a similar operation in Northern Pacific stock, seemed imminent. Serious trouble was averted, however, by the recognition that Mr. Gates controlled the Louisville & Nashville, and by the taking over of a majority interest in that company by the Atlantic Coast Line Railroad at a figure which rendered a large profit to the John W. Gates syndicate.

On account of the fear of such operations as that which has been described, every effort is made, when new stock is issued, to induce the existing stockholders to increase their holdings, or, failing in this, to obtain assurance that the new interest shall not only be such as will strengthen the position of the company, but will not be unfriendly to those in control. The strongest inducement which can be offered to the stockholders is to sell them a safe investment at a low price and the lowest price which the law allows is par, the figure at which stock is usually offered to stockholders. This prohibition against the sale of stock below par (unless such a step is necessary to save the company from embarrassment), limits the opportunity to raise capital by the sale of common stock to companies whose profits and dividends are so large that their stocks sell above par.

The common stock of prosperous companies frequently sells at a high premium. For example, the current price of the Canadian Pacific is $181\frac{7}{8}$; of the Great Northern, $131\frac{1}{2}$; of the General Electric, 146; of the Chicago & Northwestern, $147\frac{3}{4}$; and of the Union Pacific, $176\frac{7}{8}$.[1]

The existence of these premiums, which reflect high dividends and assured earning power, make possible the plan of financing the capital requirements of such strong companies by the issue of common stock on such terms as to induce stockholders to enlarge their holdings. This plan is known as the sale of privileged subscriptions. Under the law, the stock of a corporation, as already noted, must first be offered to the existing stockholders who have the right to participate in all new issues. Only in case they are unwilling to accept the terms offered, can stock be opened to general subscription. Stock can, of course, be issued in exchange for property.

Suppose that the stock sells at a premium. The new issues can then be either offered to the stockholders at a price above par, or an offer can be made on such a basis as to prefer the existing stockholders in the subscription. In case

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[1] May 2, 1910.

the market value of the stock is realized by offering stock at a premium, a smaller number of shares need be sold to obtain a given amount of capital than if stock is sold at par. Suppose, for example, that $1,000,000 is required by a company whose stock can be sold at 150, paying eight per cent dividends. If the stock is sold at market value, 6,666 shares will be needed to obtain the $1,000,000 necessary. If it is sold at par, however, 10,000 shares will be required. The amount necessary to pay the eight per cent dividend on 6,666 shares is $53,328, while on 10,000 shares $80,000 would be required. If the stock is sold at a premium, $27,672 of annual dividends, assuming that the eight-per-cent rate is continued, can be saved for the company, over the disbursements which must be made if the stock is sold at par. As a result, the rate of dividend can perhaps be increased, and the price of the stock advanced on the strength of its larger dividend returns.

In view of these facts, the directors may insist that they should make the best bargain possible for the company, that the stockholder shall derive no special or exceptional advantage from his position as part owner of the corporation; that he should be treated in the same way as any investor. Furthermore, under the plan of selling stock at a premium, the dividends paid by the company, and the price of the stock will show its true earning power. No more stock will have been issued than is necessary to provide the amount of money required for the desired improvements. The higher the price of the stock ascends, borne up on the rising tide of dividends, the smaller will be the number of shares to be sold to obtain the same amount of money. The Pennsylvania Railroad Company, for example, has received large sums as premiums on stocks sold. Without these premiums, which were invested in the business, the outstanding stock of the Pennsylvania might have been materially greater than it now is.

On the other hand, if stock is sold at par, or at less than market price, the corporation must issue a larger number of

shares than may conceivably be required. It may be impossible, on account of the issue of this extra stock, to do more than maintain the regular dividend, and the price of the stock, therefore, may not advance to the point which it would reach did the directors refuse to sell more shares of ownership than are necessary to obtain the money required.

In the case of Public Service corporations, the principle has been conclusively established in most of the leading states that they shall not be allowed to earn more than a fair return on the value of their property, and it has also been considered important in some states that a corporation should not increase its capital stock beyond the amount actually necessary to secure funds for capital expenditures. In Massachusetts, for example, the issue of all bonds and of any increase of stock in excess of the original capital is limited to such amount as the railroad commissioners shall, after a public hearing, determine will realize the sum which has been properly expended, or will be reasonably required by the corporation for corporate purposes. As a rule, however, a company whose stock sells at a premium does not attempt to obtain any part of the premium by a public offering, but offers its stock to its owners at par. Such a sale is called the offer of a privileged subscription.

The stockholder receiving the privilege can avail himself of it either by selling his right to subscribe to the stock, which is made assignable for the purpose, or by selling a certain portion of his existing holdings after he receives the evidence of his right to subscribe, at the existing market price, replacing these shares at par out of the new issue, or he can retain his stock and take the new shares as well. In the first two cases mentioned—namely, the sale of the assignable right to subscribe, or the sale at the market price of an amount of stock equal to that to which the stockholder is entitled to subscribe at par—he makes a profit which approximates the market premium of the stock, times the number of shares which he sells. Since the right will only be purchased by some one desirous of becoming a subscriber to the

stock, its price is usually less than the difference between par and market value. Unless the intending subscriber can obtain his new stock at a lower price by purchasing a right, he will prefer to buy the stock direct.

The value of some of these privileges has been very great. In an article in the *Quarterly Journal of Economics* for February, 1905, entitled "Stockholders' Profits from Privileged Subscriptions," Dr. T. W. Mitchell has computed the profits which could have been realized by stockholders of the leading railroad companies which have issued privileged subscriptions. Dr. Mitchell finds that if a stockholder of the Illinois Central had purchased 100 shares at a price of 135 per share in 1887, he would have received between that date and 1903 eight privileges. If he had sold the number of shares to which he was entitled to subscribe immediately after receiving his privilege and had invested the proceeds, Dr. Mitchell finds that, from 1887 to 1903, he would have received from all of his eight privileges a total, principal and interest, of $5,740. This is equivalent to a return of $222 a year during the seventeen years of his investment, or 1.64 per cent which would have been added to the regular dividends on this stock. A man making a similar purchase in 1895, would have received from his five privileges a total of $2,953, which is equivalent to $265, or 2.73 per cent, a year. Stockholders who made their investments in 1900, 1901 and 1902 respectively have made, according to Dr. Mitchell, from privileges alone, 4¾ to 5¼ per annum on their investment, and that, too, when their original purchases were made at high premiums. The Great Northern has also been very liberal to its stockholders. Since 1893 the stock of this company has sold above par. All the stock issues of the company after the first, with one exception, have been distributed, pro rata, among the stockholders of the road at par. The market value of the stock at the time these various issues were distributed ranged from $140 to $264 per share. The stockholder could, therefore, have paid $100 per share for his new stock, and could at once have sold it upon the

market for a much higher price, realizing from the transaction from \$40 to \$164 per share.

If the stockholder does not care to sell his right to subscribe, or to part with any of his stock, the privilege gives him an opportunity to increase the return he receives on his investment. Suppose he has purchased the stock of a company paying six per cent dividends for \$150. His return is four per cent. The company, within five years after he has purchased the stock, offers to stockholders the privilege of subscribing to new stock at par to an amount equal to eighty per cent of their holdings. This stockholder, instead of selling the right to the stock, prefers to increase his investment on the favorable terms offered. At the end of five years, he owns 180 shares on which the annual return is \$6 per share, or \$1,080, on an investment of \$23,000, or 4.7 per cent. There is little doubt that this is the course followed by the majority of stockholders when privileges are offered to them. By the correct method of computing the yield on investments, the return on a stock should be obtained by dividing into the rate of dividends, not the cost price, but the market price. An investor who takes advantage of a privilege to buy a six per cent stock for \$100 per share which is selling on the exchange at \$150, has only a four per cent investment, since a share of stock represents to him \$150 of capital and \$6 of income. The investor, however, estimates the return by comparing the cost of the stock with the rate of dividend, and this belief influences him to hold fast to stock, new issues of which are occasionally sold at less than market value. In no other way could the failure of shares to show heavy declines after the announcement of privileges be explained. Some decline is usually experienced following the announcement of a privilege, but it is seldom sufficient to warrant the conclusion that a large number of stockholders are disposing of their shares. There is no reason for them to do so if they have confidence in the value of the stock, since they can take their profit at any time by selling at a premium stock which they purchased at par.

When a corporation increases its issue of stock, it must keep in mind not merely the amount of money which the new stock will bring, but the effect of the issue upon the composition of the stockholding constituency; the necessity that the subscription should be a success and that the money should be promptly forthcoming; the desirability of being able to receive new capital from the stockholders when required, no matter what the condition of the money market and to any amount that may be necessary; the justice and expediency of extending to stockholders more liberal treatment in the matter of subscription than they extend to outsiders; and, finally, the fact that the sale of a privilege is equivalent to an increase in the rate of dividends.

Let us take up these considerations in order. The sale of stock at a high premium means that new interests are brought into a company, and that its stockholders are continually changing. Existing stockholders, many of whom will have purchased the stock at much lower prices than those prevailing at the time an attempt is made to secure a premium from a new issue, will have no inducement, other than their general confidence in the company, to increase their holdings on less favorable terms than those which they previously secured. Under these circumstances, therefore, while a large amount of the new stock may be taken by existing stockholders, it is fairly certain that much of it will be sold to outsiders. These new interests may have their own preferences for directors and officers, and their influence may be sufficient to disturb the management and control. When, however, stock is sold at par with a valuable privilege attached, based on the existence of a high premium in the market, the stock is very closely held for investment. Little stock is offered for sale, since the stockholder of record knows that, from time to time, in addition to the yield on the stock represented by a comparison between the purchase price and the dividend paid, he will have an opportunity to increase his investment on more favorable terms than if he desires to gain an immediate profit in one of the ways described.

The election of such a course of action by the stockholder is the more certain when it is remembered that the values of stock privileges are not, as a rule, fully capitalized in the value of the stock. If a corporation would announce that on January 1st of each year its stock would be increased ten per cent, and that stockholders of record would have the privilege of subscribing to the new stock at par, then the value of the privilege would be expressed in the market value of the stock, which would be established on a permanently higher level. No such assurance can, however, be given to the stockholders. The directors will follow the policy which seems best at the time. They cannot limit themselves in the methods which they will employ for raising new capital. It is impossible, therefore, that these privileges should be counted upon at any particular time and to any particular amount. They are incidental and fortuitous gains to the stockholder, gains which he has every reason to believe he will receive in the future as he has received them in the past, but which will not be fully reflected in the higher market value of the stock. To gain these privileges, therefore, the stockholder must retain his shares. It is well known that those corporations, such as the Illinois Central; Chicago, Milwaukee & St. Paul; Great Northern; United Gas Improvement Company; and New York, New Haven & Hartford Company, which have granted valuable privileges, have a body of stockholders whose composition changes slowly.

Directors place a high value upon permanence in their stockholding body. Stockholders of long standing can be counted on to support the management. In the unlikely event of a contest for proxies, the limited supply of such a stock makes it very difficult and expensive for an outside interest to buy control. One of the most serious difficulties experienced by Mr. E. H. Harriman in his contest for the control of the Illinois Central in 1907, was the firmness with which most of the individual stockholders supported Mr. Stuyvesant Fish's administration.

Another argument in favor of selling stock at par is that

the securing of a premium on the sale of a large amount of stock is an uncertain matter, depending on the condition of the stock market, which may change overnight. In order to guarantee that a premium will be secured, unless the subscription price is placed so far below the market price that it amounts, in effect, to a privilege to stockholders of record, the services of an underwriting syndicate must be employed. The Pennsylvania Railroad, for example, in 1903 offered $75,000,000 of stock to holders of record at $120 a share. The stock was at that time selling above 150. No difficulty was anticipated in disposing of the stock as offered in the subscription. A general decline in stock values, however, set in which carried down the value of the Pennsylvania stock with it. It was feared that the stock might fall below the subscription price by the date when the subscriptions were to be made. In this event the credit of the company would have been seriously damaged, since the subscription offer would have to be withdrawn. To guard against such a contingency, an underwriting syndicate was formed, headed by Speyer & Company, which, in return for a commission of $2,250,000, agreed to take from the company any of the $75,000,000 of stock at the subscription price of 120 a share, which the stockholders should not take. The announcement of the formation of this syndicate steadied the price which had at one time fallen to 114½, and the syndicate had to assume only a small part of its obligation, making a large profit on the transaction. The Pennsylvania Railroad is probably the strongest railroad corporation in the world, and its stock is highly esteemed by investors. On this occasion the stock was offered far below the market price, and yet the securing of a premium was only made possible by the intervention of an underwriting syndicate.

On the other hand, a corporation whose stock sells at a high premium, and which offers new issues to stockholders at par, is never at a loss to obtain new capital funds. During 1906, when the bond market was seriously depressed, and when the strongest railroad and industrial corporations, rather

than sell long term bonds on a five per cent basis, were resorting to the expedient of short term notes paying five and six per cent interest, four of the largest railroad companies—the Great Northern, the Northern Pacific, the Chicago, Milwaukee & St. Paul, and the Chicago & Northwestern—raised, among them, about $300,000,000 from their stockholders, by the sale of stock at par. If they had gone into the bond market, it would have been difficult for them to obtain this amount of money. They might have had to pay for three years an interest rate of at least six per cent on notes issued in anticipation of the sale of the bonds.

There is this further to be said in favor of the sale of stock on a privileged basis to holders of record, that it is fair to the stockholder who does not care to increase his investment, and who would not be able to participate in any of the benefits of the new issue, if it were offered at a premium. Such stockholders receive their rights to subscribe which they can sell in the manner already explained, and in this way participate, although to a less extent than the stockholders who hold their stock, in the benefits of the new stock issue.

The issue of premium stock at par to stockholders is an indirect method of distributing the company's surplus in the sense that a larger disbursement must be made on the stock than if this has been sold at a premium. A corporation which obtains $1,000,000 by selling 10,000 shares of stock at par, when it could have obtained the same money by the sale of 6,666 shares at 150, is assuming a larger burden than is necessary to obtain the money. Its stock capital is 3,333 shares larger than it would have been had the full market price been obtained. The dividend rate cannot be increased so rapidly as though a smaller number of shares had been sold to obtain the amount required. For this reason, the sale of privileged subscriptions by public service corporations has been severely criticised. There is a strong tendency in public sentiment to compel these companies to sell their stock to realize the highest market price obtainable, and

not to favor stockholders by the sale of stock on preferential terms.

The law usually does not take cognizance of the market value of stock. It merely requires that the par value should be paid in cash, and in the absence of a special statute or ruling to the contrary, the corporation has authority to sell its stock at par. Furthermore, market value, as already shown, is unstable and uncertain. The realization of a given profit by the sale of a privilege, which, as we have seen, is a course adopted by only a portion of the stockholders to whom privileges are offered, is a doubtful matter. The Interstate Commerce Commission in the case of the City of Spokane vs. Northern Pacific Railway Company, considered this question of the return from privileged subscriptions, in reaching a conclusion as to the earnings of the Northern Pacific. The complainants in this case asserted that the Great Northern, one of the defendants in the case, had distributed its stock, from time to time, in such a manner as to give its stockholders large profits in addition to their dividends, and insisted "that this manner of selling stock is vicious and unlawful, and that, in determining the return to these stockholders, we must have in mind the benefit conferred upon those stockholders by this operation."

The commission, however, rejected this view as follows:

"Assuming, without deciding, that the complainant is right in its position that this practice is both unlawful and unwise, how can we, in this proceeding, take any practical note of what has been done? This stock is selling to-day, January, 1908, upon the market at something less than $120 per share. If the original stockholder has retained and now owns his stock, he paid $100 in the beginning, has received a regular dividend, and now owns his stock at the above advance. While the profit to him has been a handsome one, there is certainly nothing here which would call for a penalizing of the stockholder. Suppose, now, that, instead of retaining the stock, the stockholder sold the same to some innocent purchaser who paid the market price, and who has

continued to own the stock from then until now. This present stockholder paid perhaps $264 a share for his stock. He has lost $144 per share. Should we, for that reason, compel him to sustain a further loss? The manner in which this stock has been manipulated may furnish a strong argument against the propriety of permitting the sale of new stock in this manner, but so far as this particular company and the stock already issued are concerned, the transaction is ended, and can be given no practical consideration in determining what rates shall be charged by the Great Northern Railway Company."

There is reason to believe that the practice of privileged subscriptions will not long be permitted without restrictions to public service corporations. They will probably be required, when selling new stock, to obtain the highest possible price. This does not, however, mean that stockholders will no longer be favored with opportunities to subscribe on preferential terms, but merely that the value of the preference may be reduced. If a public service commission is required to authorize an issue of stock selling at a premium, and to name a price at which the stock can be sold, unless they wish to take the responsibility for a possible failure of the subscription, they will not insist that the corporation should attempt to obtain the full premium ruling at the time the offer is made. Some lower figure will be named, and at this figure the stockholders of record, to whom the stock must first be offered, will usually take a considerable amount of the new issues, especially if the premium is guaranteed by an underwriting syndicate.

CHAPTER XXII

THE SALE OF PREFERRED STOCK

A CORPORATION desiring to provide new capital from the sale of stock seldom resorts to common stock unless this is selling at a high premium. The law usually requires that stock should not be sold at less than par value, unless it may be necessary to offer it at a discount in order to relieve the company from pressing financial embarrassment. When a company desires to offer stock at a discount, as did the Western Maryland recently in an offer of common stock at $50 a share, it is sometimes necessary to get permission from the Legislature to offer the stock at this low price. It is, moreover, usually difficult to find a purchaser for stock at a discount. A low price indicates the general lack of confidence in the ability of a company to pay reasonable dividends on the stock. Until, therefore, a company has reached an assured financial position, the sale of common stock is usually not available as a means of obtaining new capital. Failing common stock, there is left for the choice of the directors either preferred stock or bonds.

The bondholder has no voice in the management of the corporation. In return for its obligation to pay him a fixed sum at regular intervals, and to secure him in the return of his principal should he desire it, he is willing to forego participation in profits above the amount of his interest which, as a rule, does not exceed five per cent, and seldom goes above six per cent. The preferred stockholder, on the other hand, expects from six to eight per cent as a preferred charge in advance of dividends upon the common

stock. He also demands a voice in the management of the company. So far as the common stockholder is concerned, an issue of bonds, if this can be safely made, is usually preferable to the sale of preferred stock. The common stockholder's share of the profits is larger if bonds are issued for new capital, and he is left undisturbed in the control of the company.

There are, however, opposing considerations. Dividends on the preferred stock, even if these dividends are made cumulative, although the investment standing of the corporation demands that they should be paid if earned, need not be paid. A company may pile up an unlimited amount of preferred dividends, while still remaining entirely solvent, and in a most flourishing condition. Interest, on the other hand, is an absolute charge against income. It must be paid, or the courts will seize the property of the company for the benefit of its creditors. When any doubt exists as to the ability of the corporation, in good years as well as bad years, to earn interest on the capital which it proposes to secure by the sale of bonds, and when the sale of common stock is not possible, then preferred stock, rather than bonds, should be sold. As between preferred stock and bonds, if safety is considered of primary importance, a conservative management will obtain funds by the issue of stock, and will limit its bond issues to the amount on which the smallest net earnings which the corporation is likely to secure, will be more than sufficient to pay the interest charges. If this minimum of net earnings will not pay interest on the amount of capital required, then preferred stock should be issued to obtain the amount on which interest cannot be assured.

In determining the expediency of a bond issue, moreover, the starting point should not be the earnings of the company, increased by the returns on the improvements in which it is proposed to invest the new capital funds, but the earnings of the company as they stand before the increase of its liabilities. The new capital will probably be productive,

but there is no certainty that it will be immediately productive, and, in the meantime, bankruptcy might overtake the corporation if it relies upon the issue of bonds to provide the necessary funds for these improvements. Again, certain enterprises, as we have seen in a preceding chapter, do not furnish proper security for bond issues. The borrowing power of most industrial enterprises is limited to a small portion of their assets, in some cases, as we shall see later, to the amount of their current assets. If they wish to raise additional capital, it must be by the sale of preferred stock.

We have discussed in the chapter "Materials of the Financial Plan" the conditions under which preferred stock can be issued, and the safeguards demanded by the purchasers of such stock when put out as a part of the original plan of capitalization. The precautions taken when preferred stock is issued after the organization of the company usually include both those safeguards already described, and also supplementary provisions, which are intended to protect the preferred stockholder against any abuse of their power by the interests in control of the company. The purchaser of preferred stock put out by a going concern as the means of obtaining new capital occupies a different relation to the company from the holder of the stock as originally issued. In most of the consolidations, which have furnished nearly all the preferred stock now dealt in on the public exchanges, preferred stock was issued to the owners of plants which were put into the consolidation. The original holders of the preferred stock were, in a sense, partners in the enterprise, receiving common stock along with their preferred stock, and not exacting any unusual guarantees from the corporation. When preferred stock is issued by a going concern for cash, various precautions are taken to make the stock as safe an investment as possible; to give to the holder of preferred stock the nearest possible approach to the security of the bond.

Preferred stock issued to obtain new capital is, with few exceptions, made cumulative both as to dividends and to

assets. The amount of the preferred stock issued under these circumstances cannot be increased without the consent of a large majority of the outstanding stock. Since the bonds of the company precede the preferred stock, precautions are taken to prevent any increase of debt without the consent of the preferred stockholder. Preferred stock, when issued to obtain new capital, is more likely to be made participating than when included in an original issue. The common stock originally issued has by this time been sold, no syndicate has any common stock which must be favored, and it may be necessary to give to the preferred stock the right to participate in dividends in order to make it attractive to the investor. Preferred stock issued to obtain new capital is also more likely to carry with it special voting powers.

An effort is sometimes made in preferred stock contracts to enforce conservative management upon the company. This is a new feature, but has been quite prominent in recent issues. The danger to the preferred stockholder is that the company shall make excessive disbursements in common stock dividends, so that the necessary surplus will not be accumulated. Every dollar which the preferred stockholder can withhold from common stock dividends is so much gained in the greater security of his stock. This reservation of profits may be made by including in the contract with the stockholder the obligation of the corporation to build up a reserve fund out of profits in advance of common stock dividends. A typical provision of this character appears in the recent issue of preferred stock by the Underwood Typewriter Company.

The charter of the company contains the following, among other provisions, for the protection of the preferred stock:

> There shall be set apart from the net profits of the Company at the rate of not less than $100,000 per annum, a fund to be known as "SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT," which shall be

made and kept good at the rate of $100,000 per annum for each year before any dividends shall be paid on the common stock, and after the expiration of three years from the date of incorporation of the Company said SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT shall be used annually in the purchase and retirement of said preferred stock at the lowest price at which the same may be obtainable, but in no event exceeding a premium of twenty-five per cent over and above the par value thereof. Such purchases may be made at the option of the Company either at public or private sale, and all preferred stock so acquired shall be canceled.

The Company shall, in no event, pay or declare any dividends on the common stock until the annual sum of $100,000 shall have been first set aside and paid into the SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT for the purchase and retirement of preferred stock, nor as long as there shall be any arrears in respect of such SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT, and no dividend in excess of four per cent shall be declared or paid on the common stock until and unless there shall first have been accumulated and set aside from and out of the net earnings of the corporation the sum of $1,000,000 by way of surplus to the credit of said SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT, either in the form of cash or its equivalent or of retired and canceled preferred stock of the par value of $1,000,000. This SPECIAL SURPLUS CAPITAL RESERVE ACCOUNT may be used for the payment of dividends on the preferred stock provided there are no other funds applicable for that purpose, and provided further that all encroachments upon or arrears in said fund shall be made good out of future earnings before any dividends whatever shall at any time be paid or declared on the common stock.

The charter of the American Piano Company which recently offered preferred stock, provides that:

No dividend on the common stock can at any time be paid either in cash or otherwise if such payment

> would reduce the actual surplus of the company to an amount less than ten per cent of the par value of the total amount of the issued and outstanding preferred stock; nor, when the actual surplus of the company is less than fifty per cent of the par value of the total issued and outstanding preferred stock, shall any dividend on the common stock be declared or paid unless, at the time of the declaration thereof, there shall be added to the surplus, out of the net profits, an amount equal to not less than one third of the total common stock dividend declared.

These provisions are included in the fundamental contract between the preferred stockholders and the corporation; they can be strictly enforced against the company; and they furnish a large measure of protection to the preferred stockholders against a too liberal management of income by the directors.

A feature which is usual in preferred stock contracts, when the issue is made to procure new capital, is the right of redemption. Ordinary issues of preferred stock do not often contain such a right. When the common stockholders have consented to placing six or seven per cent preferred stock ahead of their own right to participate in the profits of the company, it is fair to them, in case the earnings of the company improve to the point where a lower dividend preferred stock or some form of bond may be sold, that they should be allowed to retire the preferred stock. When a large part of the issue of preferred stock has been taken by the common stockholders who safeguard themselves by the preferred claim, these stockholders may wish to participate in the earnings of the company to a larger amount than that to which their preferred stock entitles them. If their contract allows them equal participation with the common stock in all dividends over the prescribed rate on the preferred stock, there is no advantage, from their point of view, in retiring the preferred. If, however, this right of equal participation has not been given, and it is unusual, they may desire to exchange their preferred stock for com-

mon stock, if the increasing earnings of the company make such a course attractive. It often happens, moreover, that the preferred stock has been given, as an extra measure of protection, the right to elect a majority of the board of directors. In such a case, the common stockholder is naturally anxious to regain control by retiring the preferred. For the protection of the preferred stockholder, however, and not to make his investment in this stock unattractive, the right of compulsory retirement or redemption is usually fixed at a point well above par, usually not less than 110. The right of redemption may terminate at the end of a given number of years, or may not begin until the expiration of a period.

When issued under proper safeguards, and by a prosperous company which is paying dividends on its common stock, cumulative preferred stock is coming to be regarded as an attractive investment, and is in increasing demand. While there is no reason to believe that companies will ever be able to obtain capital by the issue of such a security on as favorable terms as by issuing bonds, yet it is reasonably sure that preferred stock will be sold on terms more favorable to the corporation than those which now prevail.

CHAPTER XXIII

THE ISSUE OF EVIDENCES OF DEBT

THE method of providing new capital for corporations of established credit and assured earnings, which is steadily growing in popularity, is the method of borrowing. As between the issue of preferred stock and bonds, when the conditions of the company permit the issue of bonds, this method is usually selected. The bondholder, in return for a secured claim to a fixed return on the obligations which he buys, leaves the stockholder in possession of the property of the company, and in the enjoyment of all its profits over the amount necessary to pay interest, and, where this is provided, the appropriation to build up a sinking fund. Because of the security given, moreover, the rate of return which the bondholder exacts is much less than would be demanded by the holder of preferred stock. If the company can borrow money for extensions and improvements, therefore, the surplus remaining for the stockholders, after providing for a return on the new capital required, is usually two, and sometimes three per cent greater than if preferred stock is issued. These reasons for the issue of evidences of debt rather than preferred stock are, in almost all cases, controlling.

The evidences of debt which may be issued by a corporation seeking new capital may be divided into short term loans and long term bonds. The first class may be again divided into bank loans and short term notes. We shall consider these in their order.

Bank loans are made in anticipation of the proceeds of business transactions which will mature in the near future. It is unsafe for a bank to advance money to be put into any

form of fixed capital which will do no more than return a safe margin over the interest on the loan. Bank loans must be either paid when due, principal and interest, or materially reduced. Experience shows that permanent capital cannot be obtained from the commercial bank. The business of the bank is to supply the temporary needs of business for working capital. Nearly every business is, to some extent, seasonal in its character. The agricultural implement dealer, who sells to the farmer, may deliver machinery in the spring and wait until after harvest for payment. In the fall, when he has collected for the season's sales, and has only begun to manufacture for next season, there will be no need for the implement manufacturer to borrow largely from the banks. The amount of capital locked up in machinery sold, will, however, steadily increase as the season advances, until, before harvest, he will have a large temporary investment in notes and accounts. It is not considered economical that the manufacturer should have invested sufficient capital to carry his business for the entire year without resort to the banks. If such a policy be decided on, for a part of the year, the manufacturer would have on hand a large amount of capital on which he might be paying six per cent dividends while receiving only three per cent for it from the banks.

The manufacturer of agricultural implements obtains notes from his customers, and these notes are used as collateral for his own notes, which are sold to banks. When the notes mature they are paid out of the proceeds of collections. This illustration shows the principal contribution of the banks to the working capital of industry. Banks sometimes extend permanent credit to concerns which are growing rapidly and require an increasing working capital, but the bank's contribution will be only a portion of the working capital of the business. It is better that a company should provide for the normal amount of working capital, resorting to the banks to supply the seasonal demands for capital, and any extraordinary demands to meet which permanent provision cannot be made.

Bank loans are not available as a source of permanent capital, although they may furnish a portion of the capital which a corporation requires. In some cases, however, a special form of obligation, either secured or unsecured, is favored by corporations, and largely sold to banks as well as to investors. This is known as the short term note. Such obligations run for one, two, or three years, and pay a high rate of interest—five or six per cent. This form of obligation is usually resorted to during periods of stringency in the money market, when long term bonds cannot be sold except on the basis of a high interest yield.

A first-class railroad corporation expects, under normal conditions of demand, to sell its first mortgage four per cent bonds at par. The money market may, however, get into such a condition that a four per cent bond of this class cannot be sold except at a price to yield five per cent to the investor. Suppose the corporation wishes to issue a thirty year bond. If it makes the issue at such a time, it will have to pay the one per cent extra for thirty years, or thirty per cent on the entire amount of the issue. Looking at the proposition solely from the standpoint of income, and assuming that an improvement in the bond market will, within two or three years, make it possible to again sell four per cent bonds at par, it is advantageous for a company, in the circumstances described, to borrow the amount required for, say, three years, paying six or seven per cent interest, and trusting to its ability to refund the obligation at maturity on a four per cent basis. Instead of paying thirty per cent premium, therefore, the company which makes an issue of two year six per cent notes, and refunds these on a four per cent basis, will only pay four per cent premium for the money over the entire period.

The conditions under which the issue of short term notes is advantageous are illustrated by the situation of the American money market in 1906. During this year, the bond market had been extremely dull. Prices generally declined; issues yielding less than four and a half per cent gained

little attention. The explanation was found in the high rates for money. The largest bond buyers are the financial institutions, banks, savings banks, trust companies, and insurance companies. During 1906, these large bond buyers were able to lend their funds on call through the banks, or to purchase commercial paper at very high rates of interest, and with perfect security. As a result, they reduced their bond purchases. As an illustration of the stringency of money prevailing during this year, may be cited the case of one of the largest manufacturing concerns in Philadelphia, and one of the foremost enterprises in its field, which was obliged to sell its paper on an eight per cent basis. Individual bond buyers, large merchants and manufacturers who are, to an increasing extent, investing a portion of their profits in negotiable securities, had their funds so fully employed in their business that no surplus remained for investment. Railroad and industrial corporations were at this time heavily committed to new undertakings. To obtain the money for these extensions and improvements, rather than burden themselves with high rates of interest during the life of long term bonds, they preferred to sell short time notes, generally paying six per cent interest, which would be taken by banks and private investors on account of the security offered and the high rates of interest approximating those which could be obtained in the loan market. The amount of notes put out by the principal railroads and industrial corporations during this year was $136,000,000. The corporations making these issues preferred to pay higher rates for one, two, or three years in the belief that when the date of maturity arrived, the condition of the bond market would have so much improved as to permit the retirement of these short term obligations with bonds at lower rates of interest.

An illustration of the use of short term obligations was the $15,000,000 of six per cent gold notes issued by the Southern Railway on May 1, 1908. The bond market at this time was so greatly depressed that none but issues of the strongest corporations would be taken. The Southern Railway was not in

this class. Its credit was considered so doubtful that it was not expedient to attempt to market its bonds. These notes were offered at 98½ and accrued interest and were payable on or before May 1, 1911.

Short term notes may be either secured or unsecured. If unsecured, their value rests upon the general credit of the company which depends primarily upon its surplus earnings over charges. The security of notes is also increased by the fact that, in most cases, their proceeds are invested in the improvement of the property. For example, in the case of the Southern Railway notes, it was proposed to apply the proceeds of the notes substantially as follows:

"First, to provide capital for obligations accrued and to accrue, representing generally the retirement of equipment obligations, the purchase of steel rails, construction now under contract, and additional betterments and improvements to the properties covered by the development and general mortgage, say $8,500,000; to provide for the redemption of the sterling notes which will mature on June 1st and July 2d next, say $3,000,000. The balance to be used to reimburse the treasury to that extent for moneys heretofore expended for construction and capital account, say $3,500,000."

Out of $15,000,000 of notes, the proceeds of $8,500,000 would go to improvements which might reasonably be supposed to produce revenue equal to the interest on the notes, and which increased, to that extent, the value of the property which secured the notes. Only $3,000,000 were provided to fund other notes. Short term notes are better secured when the proceeds of the sale are to be spent for the benefit of the company than when they merely take the place of other maturing obligations. The sale of these notes for refunding purposes is much more difficult than when at least the major portion of their proceeds is to be spent upon the property.

Short term notes are usually secured. In cases where they have been issued on account of the present unsalability at attractive prices of mortgage bonds already authorized, it is customary to pledge collateral as additional security for the

notes. The $15,000,000 of Southern Railway notes, for example, were secured by $20,000,000 of Southern Railway development and general mortgage four per cent bonds, Series "A," by $2,500,000 of Tennessee Central Railroad prior lien mortgage four per cent bonds, and by $2,000,000 Virginia & Southwestern Railway first consolidated mortgage five per cent bonds. Earlier in 1908, the Hudson Company, of New York City, sold $15,000,000 of six per cent notes, secured by the deposit of $22,500,000 of the first mortgage 4½ per cent bonds of the Hudson & Manhattan Railroad Company which owns the tunnels between New York, Jersey City and Hoboken. Indeed, the securing of these short term obligations by collateral is so common that the giving of such security may now be considered obligatory. Even a strong company like the Pennsylvania Railroad Company, or its subsidiary, the Pennsylvania Company, secures its short term obligations by ample collateral.

Since these notes are sold on a banking basis, and are secured by collateral, it is fair to the company that they should have the same liberty of reducing their loans which is allowed to the ordinary borrower on collateral. This provision is usually made. The Hudson Company's notes, for example, were issued subject to the right of redemption on any interest date, upon thirty days' notice, at par and interest, plus a premium of one per cent per annum upon the principal from date of redemption to maturity.

If at any time during the life of the short term obligation, a favorable opportunity arises to sell the collateral, it is usual to provide that this can be done. Thus, in the issue above described it is provided that:

"The Southern Railway is to have the right at any time to withdraw by payment therefor in cash at the following prices: Development and general mortgage four per cent bonds, Series 'A,' at the same price and for the same periods as provided above for the conversion of the notes; Tennessee Central prior lien mortgage four per cent bonds at not less than 85 per cent; Virginia & Southwestern first consoli-

dated mortgage five per cent bonds at not less than ninety per cent, with accrued interest in each case. Such cash is to be applied by the trustee to the purchase or redemption of the notes as provided in the trust indenture."

The use of notes is merely a temporary expedient to bridge over a period when bonds cannot be sold. Although they may be sometimes funded into other notes of the same kind, it is not possible for this process to be continued indefinitely, and refunding usually requires higher interest or better security on the new notes. These notes must, in other words, be paid, principal and interest, within a short time. On this account, large reliance upon this means of obtaining new capital is, for a weak corporation, considered unsafe. Although it is expected that the bond market may improve to admit of the collateral back of the notes being sold at good prices, yet this improvement cannot be guaranteed, and it has frequently happened that short term obligations came due at a time when it was most inconvenient for the company to pay them. With a strong corporation, in such an event, no difficulty is to be expected, but if the maturity of the notes coincides with a period of business depression, when the net earnings of the issuing company are below even their normal level, and when the bond buyer is unusually critical concerning the securities offered him, the company which, for the sake of saving interest, has burdened itself with the obligation to repay a large sum of money at such an inopportune time, may run great danger of bankruptcy. The difficulty experienced by the Wheeling & Lake Erie, and the Erie Railroad Companies in refunding their notes maturing in 1908, illustrates the danger of relying upon this method of procuring funds. The first of these companies was forced into bankruptcy by the maturity of a note issue, and the Erie was only saved from a like fate by the intervention of Mr. E. H. Harriman. For any but the strongest companies whose ability to take care of maturing obligations is undoubted, the provision of new capital by the issue of short term notes is to be entered upon with great caution.

CHAPTER XXIV

LONG TERM BONDS

Long term bonds are of two kinds—those without special security, known as debentures, and those with special security, such as mortgage bonds, collateral trust bonds, and car trust certificates.

A debenture is a certificate of debt issued by a corporation without mortgage or collateral security. An illustration of a debenture is an issue by the New York, New Haven & Hartford in 1904, which is, in substance, as follows:

> Fifty years after date, the New York, New Haven & Hartford Railroad Company promises to pay . . . . or order, $1,000 at the office of its Treasurer, in the city of New Haven, Connecticut, and to pay interest thereon from date at the rate of 3½ per cent per annum.

The security offered to the debenture holder is the right of action against the company in default of their payment of principal or interest. In this respect, debentures are superior to preferred stock which they resemble in having a prior claim to earnings, a claim, however, which is enforceable by legal action.

The measure of the value of the debenture bonds is the surplus earnings of the corporation over the prior fixed charges. They are, in no respect, save in name, different from junior mortgage bonds, and they usually bear a higher rate of interest than first mortgage bonds. Debentures differ radically from income bonds. An income bond is a bond

whose interest is payable if, in the judgment of the directors, it has been earned, but whose principal, like that of any other bond, is payable at a definite date. So far as their interest is concerned, therefore, income bonds are in exactly the same position as preferred stock, and they are of inferior value to cumulative preferred stock in that the interest on incomes is not carried over to accumulate against future earnings. In so far, however, as the principal of income bonds must eventually be paid, they are superior to preferred stock. Income bonds have been but little used in recent years. They were extensively employed before 1890 in various railway reorganizations, the Wabash incomes being perhaps the most familiar instance, but they have fallen into disuse because they possess the virtues and the value neither of stock nor bonds.

Returning now to the consideration of debentures, we find that the contracts with the debenture holders may contain certain special securities which go far to compensate for the absence of mortgage security. It may be provided that no mortgage shall be placed upon the property unless the debentures are included in the lien of the mortgage. Thus, for example, in the offer of the debentures of the New York, New Haven & Hartford appears the following:

> These debentures will also provide, as far as lawfully may be, that if this company shall thereafter create any mortgage upon its now existing main line of railroad between Woodlawn in the City and State of New York, and Springfield in the Commonwealth of Massachusetts, or its now existing main line between New Haven in the State of Connecticut, and Providence in the State of Rhode Island, such debentures shall, without further act, be entitled to share in the security of such mortgage pro rata with any other obligations that may be secured thereby, and that any such mortgage shall expressly so provide.

It may be provided that, as long as the debentures are outstanding, the debt of the company shall not be increased. The agreement with the debenture bond-

> holders of the Colorado Fuel & Iron Company provides that "so long as any of said debentures or the interest warrants annexed thereto, shall be unpaid, no mortgage or other encumbrance shall be placed upon any of the property of the Iron Company, nor shall any other debentures be authorized or issued, nor any other bonds, except those provided for in the mortgages or deeds of trust outstanding July 1, 1901, and except bonds and mortgages to be authorized and issued to replace the bonds provided for in such mortgages or deeds of trust, in case the Iron Company may desire to refund the same or any of them, but in no event shall the par value of its said refunding bonds exceed the par value of the bonds which they shall be issued to replace, nor shall the rate of interest on any of such refunding bonds exceed the rate of interest upon the bonds which they shall be issued to replace, it being the meaning of this agreement that neither the total amount of bonds at any time outstanding nor the rate of interest thereon, so long as any of said debentures or the interest warrants annexed thereto shall be unpaid, shall be increased; nor shall any notes be issued or indebtedness authorized or created for any other purpose than the ordinary running expenses of the Iron Company.

The precautions indicated in the foregoing extract are highly desirable from the standpoint of the debenture bondholder.

A corporation which has issued debenture bonds may have retained the right to issue bonds under its various mortgages, by which the security of a debenture which can be satisfied only after the prior claims of mortgage bonds, would be seriously impaired. By inserting in the contract with the debenture bondholder such a provision as the foregoing, a corporation, so long as the debentures were outstanding, would be unable to issue any other form of debt than short term notes or an inferior grade of debentures.

It may also be provided for the protection of the debenture bondholders that the proceeds of these bonds shall be expended in a specified manner for the benefit of the prop-

erty. To quote again from the agreement of the Colorado Fuel & Iron Company:

> The Iron Company agrees that the proceeds of the initial $10,000,000 of said debentures shall be used only for additions and improvements to the plant of the company, and for working capital and other corporate purposes, and that the proceeds of the remaining $5,000,000 of said debentures shall be used only for the acquisition of additional property.

It would be impossible, in view of this clause in the contract, for the proceeds of the debentures to be used to retire outstanding indebtedness of the company, or as a means of providing funds for the distribution of a portion of the company's surplus to stockholders. The provision stipulates that all the money which the purchasers of the debenture bonds pay into the treasury of the company shall be expended in such a manner as to increase the value of the company's property, and the net earnings upon which the debenture bondholders must rely for their interest. With these safeguards thrown about him, the position of the debenture bondholder is not greatly inferior to that of the holder of a second mortgage bond.

In order to make debenture bonds more attractive, and to sell them at higher prices, many corporations have adopted the plan of making these bonds convertible into stock at a certain figure. The issue of debentures with the convertible feature is rapidly growing in favor, and several of the strongest railroads in the country—the Union Pacific, the Atchison, and the New York, New Haven & Hartford—have adopted this plan of financing their capital requirements. These convertible debentures are direct obligations of the issuing company, although they are unsecured by mortgage. They carry a fixed rate of interest and are payable at a definite date. In addition, the holders of the bonds are given the privilege of converting them into stock, usually common stock, at a certain figure, either up to a certain date or after a certain date. For example, the ten-year five per cent convertible

gold bonds of the Atchison, Topeka & Santa Fé are convertible into common stock prior to June 1, 1913, at the option of the holder, on the basis of ten shares of common stock, par value 100, for each $1,000 bond; and the Delaware & Hudson Company, in 1906, issued ten-year debenture four per cent convertible bonds, convertible into the common stock of the company prior to June 15, 1912, on the basis of five shares of stock for each $1,000 bond. The conversion privilege on some convertible bonds does not begin for a number of years, as, for example, the six per cent debenture bonds of the New York, New Haven & Hartford are convertible between 1923 and 1948, at par into the common stock of the company. As a rule, however, the conversion privilege is immediate. The conversion price is usually fixed at a figure considerably above the market price of the stock when the bonds are issued.

The advantages offered by these bonds to the investor are evident. Convertible bonds, considered as obligations of the company, rank with junior lien bonds. A company which has a long dividend record is reasonably certain to pay interest and principal of its junior mortgage bonds. The stock of the corporation represents the residuary claim to the increase in its profits and values. If the business of the company is well conducted, its stock may go to a high figure. The holder of the convertible bond can then make a large profit by exchanging his bonds for stock.

A feature connected with convertible bonds which makes them especially attractive to the speculative element always to be attentively considered in any sale of securities, is the movement of their value as compared with the movement of stock values. Since the convertible debenture is a bond, an unconditional obligation of the corporation to pay money, it will be valued as a bond by its holders, and there will be a certain point below which it will not fall. The purchaser of five per cent debenture bonds of a strong railroad company at, say, 96, can be reasonably certain that, no matter how unfavorable the financial situation may be, the price of his security will not fall much below 90. The stock

of the same company, although it may pay a higher dividend than the rate of interest on the bond, may easily fall to 75. On the other hand, when the price of the stock advances, the convertible bonds, since they are exchangeable for the stock, also rise more rapidly than other junior lien bonds which do not have the conversion privilege. The Atchison, Topeka & Santa Fé has outstanding a large issue of convertible four per cent bonds as well as a second mortgage four per cent bond, known as Adjustment Mortgage four per cent. During the panic of 1907, the adjustment mortgage 4s fell to 77½ and the convertible 4s to 80. With the revival of business, the stock of the Atchison rapidly advanced, and the convertible bonds rose. On November 24, 1909, the convertible 4s sold at 119½ while the adjustment mortgage 4s had only recovered to 94½.

Up to and beyond the conversion figure, as long as any of the convertible bonds remain outstanding, the price of the bonds and of the stock into which the bonds are convertible will move together. The price of the convertible bond will usually be lower than the price of the stock for which it is exchangeable, since a large part of the demand for convertible bonds, which have risen to high figures because of this exchange privilege, will come from investors who choose this method to acquire the stock at less than market figures. Convertibles sell at a lower price than the stock for which they are exchangeable, for the same reason that rights to subscribe to stock at par sell for smaller sums than the amounts represented by the differences between par and market price on any given date. The correspondence, however, between the price movements of convertible bonds and stock is sufficiently close to make these bonds very attractive to a large class of investors who are not averse to taking a speculative profit if this can be done with moderate risk.

Convertible bonds are also bought largely by speculators as a protection against short sales. Suppose, for example, a speculator desires to sell Atchison stock short around par. He begins his operations by buying ten of the convertible

bonds which will be selling around 98½. He then sells 100 shares of Atchison short, borrows the stock from some one who has it to lend, and deposits his bonds as the principal security for the loan, receiving $10,000 for the stock, less his commissions, with which he can pay for his bonds and have a small profit remaining, subject to the risks of his contract to deliver 100 shares of stock whenever called upon by the lender. Suppose, now, that his calculations are correct, and that Atchison falls to 90. His convertible bonds may decline, although this is not necessarily involved in a situation which would produce a fall in the price of the stock. He might, however, lose three points on his bonds. At the same time, however, he would make $10 a share on his transaction in the stock, since he could purchase 100 shares for $9,000, and deliver the stock to the one from whom he borrowed it, receiving back his convertible bonds. In the event of the speculator's calculations proving erroneous, and if Atchison stock advanced ten points to 110, he would lose $10 a share on his stock, or $1,000. His convertible bonds, however, would probably advance to 105, so that his net loss would be only $350. Furthermore, in the unlikely event of the stock being cornered, the holder of convertible debentures can protect himself by exchanging his bonds for stock which the company holds in its treasury available for the conversion from the date the bonds are issued. Owing in part to these speculative advantages possessed by convertible debenture bonds, they are in large demand, and their prices are often far above their investment values.

Whatever may be said of the debenture bond from the standpoint of the investor—and it must be admitted that the position of most debenture bondholders as unsecured creditors is, from an investor's standpoint, not especially attractive—there can be no question that they offer to a corporation whose stock is selling so close to par that it cannot count on disposing of any large amount at that figure, and which is not in a position to issue first mortgage bonds, an opportunity to obtain money on favorable terms by combining the doubt-

ful investment quality of debentures with the speculative possibilities involved in the conversion privilege. From the company's standpoint, the sale of convertible debentures is merely a deferred sale of the stock for which the convertibles are to be exchanged. This deferred sale of stock is often made, through conversion, at a high premium, a much higher premium than could be obtained by selling the stock direct. The use of convertible debentures has been criticised on the ground that a company by resorting to this form of security will spoil the market for its prior lien bonds. As a rule, however, debentures are not resorted to as long as first-class bonds under prior lien mortgages are available for sale.

CHAPTER XXV

MORTGAGE BONDS

We next take up long term obligations with mortgage, collateral, or lease security. American financiers are committed to the idea of specific security. Until recent years, it has been very difficult to sell debenture bonds at values commensurate with their real security. Laws regulating the investment of the funds of savings banks and trust funds usually stipulate first mortgage bonds. In Great Britain, on the other hand, bonds without specific lien security are more common.

Recognizing the preference of the American investor for mortgage bonds, corporation directors, in formulating a plan for provision of new capital, must keep in view, in selecting a type of obligation, the following objects: First, they must secure for the corporation the money required; second, they must procure this money at a reasonable cost; third, they should provide, if possible, in a mortgage whose bonds are readily taken by investors, for subsequent issues of bonds. The directors come next to the consideration that the investor will pay a higher price for first mortgage bonds than for any junior security. Of two bonds of equal security, so far as earnings are concerned, one secured by a first and the other by a second mortgage on the same property, the first mortgage bond will always be preferred. This preference is easily explained. In case of bankruptcy and reorganization, the first mortgage bonds are in a position of great advantage. Up to the earning power of the property set aside to secure them, they must be protected. Before the holder of

second mortgage bonds can enforce the lien of their security, they must satisfy all the claims of the first mortgage. The investor's first concern is the safety of his principal. He wishes the utmost protection. This protection the first mortgage, as distinct from any junior lien, gives him.[1]

Next in order to first mortgage bonds, in grading secured issues, the investor will rank collateral trust bonds where the security consists of other bonds or dividend-paying stock, and where the borrowing company can pay the interest, if need be, without depending upon the income produced by the collateral. Finally, he will put bonds secured by leases, such as car trust certificates. Two problems then confront the directors of corporations proposing to issue bonds. They must give the bonds, if possible, the security of a first mortgage, and, if this cannot be done, they must adopt some form of obligation which will give the bonds issued a first lien on either securities owned or on rights under leases. In case neither method is available, and also as additional security in all cases, the corporation may assume the indirect or conditional obligation of a guarantor or indorser of bonds which are sold for its benefit.

In giving bonds first mortgage security, it is necessary to deal with two types of existing mortgages. First, those which stipulate that all property subsequently acquired by the corporation shall come under the existing mortgages, and second, those which set aside specific property as security, leaving subsequently acquired property to be pledged as security for additional loans. Under the first classification we

[1] Many exceptions can be cited to this rule. Some of the best bonds are secured by general mortgages—that is, second and third mortgages. The Erie prior lien bonds, for example, are secured by a sixth mortgage on its main line. In these cases, however, the first mortgages are usually for small amounts calling for such moderate payments in relation to the surplus earnings of the company that the investor disregards the prior liens. A tendency is visible, however, in recent years, among railroad financiers, to retire, as far as possible, these underlying liens in order to bring the mortgages securing the large issues of general mortgage bonds nearer the property.

find two types of mortgages—the open-end mortgage, and the closed mortgage. Under the open-end mortgage bonds may either be issued to any amount without limit, or a bond reserve large enough to provide for all future needs of the company is authorized,[1] the bonds being protected, however, by the requirement that the money shall be invested in a specified way for the benefit of the company, or that their issue shall be controlled and approved by some disinterested authority.

Bonds are issued under a closed mortgage when the amount of bonds to be issued under the mortgage is limited. Closed mortgages are of two kinds: First, where the property subsequently acquired by the corporation is included under the lien of the mortgage; and second, where the lien is limited to the property enumerated in the instrument. The first may be called an *inclusive* and the second an *exclusive* closed mortgage. Closed mortgages have the following form of enumeration of property transferred:

> Together with all the branches, extensions and sidings thereof and therefrom, and all the lands and rights of way used and occupied, or surveyed, laid out, or intended to be used and occupied for the said railroads, branches, extensions and sidings, with all the railroad tracks, buildings and improvements thereon, and all and singular the lands, bridges, trestle works, wharves, shops, stations, depots, engine houses, engines, cars, rolling stock, furniture, equipments, and generally all and singular the estate, real and personal, of the said . . . Railway Company, *whatsoever and wheresoever, now owned or hereafter to be acquired by it.*[2]

An illustration of the exclusive closed mortgage where the lien of the mortgage is limited to specified property, and does not include any property which may be hereafter acquired, is furnished by the mortgage securing the first lien

[1] The true open-end mortgage is rare. For practical purposes a bond reserve several times the amount of the initial issue is equivalent to the authorization of unlimited issue.

[2] Italics are the author's.

convertible four per cent gold bonds of the Union Pacific Railroad Company, due May 1, 1911, which assigns to the trustee:

> All and singular the several lines of railroad, property, and premises belonging to the Railroad Company which are particularly described as follows. . . Together with all additions, lands, terminals, yards, bridges, tracks, rights of way, trackage rights, buildings, telegraphs, shops, elevators, and other structures and fixtures, easements and leaseholds, corporate rights and franchises, now held or acquired or *hereafter held or acquired* for use in connection with the said lines of railroad, *specifically above described;* and also the earnings and profits thereof, also the following described bonds and stocks, namely: . . . Together with any and all shares of stock or bonds of any other corporation which the Railroad Company may hereafter deposit and pledge hereunder by way of substitution or otherwise.[1]

Under this mortgage, the security of the bonds is specifically restricted to the property enumerated in the mortgage, and there is no obligation on the part of the company, although it may do so, if it desires, to add to this security.

First mortgage bonds can be issued under inclusive closed mortgages only if a portion of the bonds authorized has been reserved to provide for the future needs of the company. Under most of the closed mortgages issued by the large railroad companies, only small amounts can still be issued. For example, the offering by the Guarantee Trust Company of $2,072,000 prior lien $3\frac{1}{2}$ per cent gold bonds of the Baltimore & Ohio Railroad Company in July, 1908, contained the following:

> With the above offering the mortgage is closed, and in consequence this is probably the last opportunity to obtain a round amount of these bonds at a satisfactory price. The general inability of the railroads

[1] Italics are the author's.

> to create in the future new bonds which will compare in point of security with first mortgages of this class renders this an opportunity which should be embraced.

If the authorization of bonds under a closed first mortgage has been exhausted by issue, the only recourse of the directors desiring to give to the investor bonds secured by a prior lien, is to the issue of bonds by a subsidiary company organized for that purpose, and guaranteed by the parent company; or to a collateral trust issue, if the first mortgage of the parent company does not include all securities owned in its schedule of property "to be hereafter acquired"; or to a combination of the two methods. These methods of raising capital we shall take up in detail in their proper places. If the closed mortgage does not include "all property to be hereafter acquired," so that the company can subject some of its property to the lien of a first mortgage, then it is usual to execute a general refunding first mortgage, or a consolidated first mortgage which will become a first mortgage on all the property of the company when the underlying bonds mature. Provision is made for a sufficient issue of bonds under the consolidated mortgage to retire the prior lien bonds, and the general effect and impression is that of a first mortgage bond. Referring again for illustration to the issue of bonds by the Union Pacific above noted, we find the following description of the security in a letter from President E. H. Harriman, under date of June 8, 1908:

"Referring to the 'first lien and refunding mortgage four per cent bonds' of this company, I beg to state that these bonds are to be secured by a first mortgage on 1,177.71 miles main track and 146.63 miles other track of owned railroad lines. The lines mortgaged are valuable and important parts of this company's system. . . . The amount of bonds which may be issued at present on the security above stated is $50,000,000, and no further amount can be issued in addition thereto until the security of the mortgage be extended to cover

(subject only to the first mortgage of this company, dated July 1, 1897) all the lines covered by said first mortgage . . . the entire railroad mileage of the Union Pacific Railroad Company. When the lien of this mortgage is extended to cover all of the present railroad mileage of the Union Pacific Railroad Company, the total authorized amount of bonds which may be issued thereunder, including the above $50,000,000, will be $200,000,000, of which $100,000,000 are to be reserved to refund the first mortgage four per cent bonds, due July 1, 1947, for a like face amount, which first mortgage bonds shall not be extended when due, *so that the 'first lien and refunding mortgage shall ultimately become the sole first mortgage upon the entire present railroad property of the company, and upon any additional property hereafter acquired or constructed with the proceeds of bonds of this issue.'*[1] The remaining $50,000,000 bonds are to be reserved to be issued only for the construction or acquisition of additional lines of railroad, connecting with the lines then subject to the mortgage, and for the acquisition of other property for use on or in connection with the mortgaged lines and for improvements thereon, as specified in the mortgage, and all of which shall then pass under the lien securing the entire issue of these bonds."

The Union Pacific, it appears from this statement, took advantage of the fact that its first mortgage is not inclusive of all property which it may hereafter acquire, to pledge certain lines which had been built or purchased since the first mortgage was executed, under the lien of this first consolidated mortgage. This is, therefore, a first mortgage on some lines, and a second mortgage on others. It is also here provided, which is usual in this type of security, that eventually this first and refunding mortgage shall become an absolute first mortgage on all the property of the system.

Here again we find the precaution taken that the company should have available first mortgage bonds, in the pro-

[1] The italics are the author's.

vision that $50,000,000 are to be reserved for subsequent issue. Great care is taken in drawing refunding mortgages to provide that the maturing bonds should be retired, either by payment or conversion, as fast as they mature, so that the priority of the lien of the refunding mortgage shall be extended as rapidly as possible.

Bonds are not often issued under second and third mortgages except in reorganizations. So strong is the prejudice against them, that even here they have fallen into disuse. There are exceptions to this rule, but, generally speaking, second mortgage bonds cannot be sold to advantage.

CORPORATE INDORSEMENTS AND GUARANTEES

When first mortgage bonds cannot be sold, resort may be had to several methods of securing the obligations with which the desired capital is to be obtained. The purpose of each of these methods is to approximate as closely as possible the security of a first mortgage. The first of these methods is to organize subsidiary companies in the interest of the company which desires to provide the new capital. These companies issue to the parent company their bonds secured by a first lien on the property purchased or constructed, and also secured by the indorsement of the parent company. The parent company can either sell the subsidiary company's bonds direct, or can deposit them as collateral security for an issue of its debentures, unless compelled by the terms of its prior lien mortgages to deliver them to the trustees of its existing obligations. A large amount of railway mileage has been built in this manner through subsidiary companies, either because the parent company was limited in its borrowing by the terms of its mortgages, or because the laws of the State where the new lines were located required ownership by a local company. This form of financing new construction is not so common as formerly.

The use of the indorsement is still general. One of the most common uses of this method in recent years is the in-

dorsement of bonds of terminal companies by the various railway corporations which make use of the facilities thus provided. A number of issues of bonds have been made by new or weak companies in recent years secured by the indorsement of certain prominent and wealthy individuals or firms. The most conspicuous illustration of this use of individual credit to bolster up the credit of weak companies was furnished by Mr. H. H. Rogers in his guarantee of the bonds of the Virginian Railway, and by Mr. Henry M. Flagler, on the strength of whose personal guarantee a large amount of notes were sold by the Florida & East Coast Railway Company. Another use of the guarantee is the sale of equipment notes given to such companies as the American Locomotive Company or the American Car & Foundry Company by weak railway companies, and which are sold with the indorsement of the equipment companies.

An indorsement of a corporate bond has, of course, the same form and significance as an indorsement on a promissory note. By indorsing a note, a person or corporation alike agree that in case the maker does not pay the note at maturity the indorser will pay it. Corporate guarantees are of two kinds: First, strong guarantees, and second, weak guarantees. An example of a weak guarantee is as follows:

> For value received the Great Western Power Co. hereby guarantees to the holder of the within bond the prompt and punctual payment, according to the terms thereof, of the principal of, and interest upon, the within bond, and further guarantees to the said holder that the sinking fund installments in respect to Series "A" bonds provided in the mortgage and deed of trust and in said bond referred to *shall be made in*[1] the manner and to the extent therein provided.

This guarantee is weak in the sense that it merely stipulates that the holders of the bonds of the California Electric Generating Company to which the guarantee referred, will

[1] Italics are the author's.

receive their interest and principal and will be protected in accordance with the terms of the mortgage. The Great Western Power Company does not itself formally assume the obligation, but merely agrees to assume it in case the California Electric Generating Company, which issues the bonds, fails to carry out its agreement. An example of a strong guarantee is as follows:

> For value received the St. Louis Southwestern Railway Company hereby unconditionally guarantees to the owner of the within bond the payment of the principal thereof and the interest thereon as the same matures and falls due, and hereby agrees itself to pay the said principal and interest if default in the payment thereof be made by the Terminal Company.

Here is an unconditional assumption of debt by the guarantor, and this form is preferred to that first given. An even stronger form is the following guarantee indorsed upon bonds of the New York & Westchester Lighting Company, a subsidiary of the Consolidated Gas Company of New York:

> For value received, the Consolidated Gas Co. of New York hereby assumes and agrees to pay the principal and interest of the within bond as the same shall respectively become payable.

Here is the strongest form of guarantee, the assumption by the guarantor of the obligation of paying interest and principal, assuming itself the risk of reimbursement from the treasury of the subsidiary company. Another form of guarantee provides that the guarantor shall deposit within a certain time before each interest date, with the trustee of the bonds, the amount required for the payment of that installment of interest. As a rule, the guarantee is preferred in proportion as the guarantor assumes an unconditional obligation under his indorsement. Another common form of guaranteed security is stock on which a certain rate of dividend has been guaranteed by another company. This method is mainly employed in connection with leases.

The remedy of the holders of guaranteed bonds or stock is the same as the remedy of the holder of an indorsed note, namely, a suit against the indorser for the amount remaining unpaid. The objections to this form of security are, therefore, the ordinary objections to indorsement security, namely, the necessity of suing the indorser, unless it is to his interest to protect his obligations, and the fact that there may be no limit to the amount of contingent liability which may be assumed. In case of strong companies, which have guaranteed bonds secured by mortgages on integral portions of their system, covering property which is essential to their business, guarantees are regarded as of great value. Such bonds are often sold on no other security than the indorsement, no attention being paid to the earnings of the company actually issuing the bonds.

The second objection to the guarantee as compared with the mortgage security, is more serious. When bonds are issued, secured by a mortgage, certain property is conveyed to the trustee. The purchaser of the bonds knows that when the issue authorized by that mortgage has been exhausted, no further bonds can be issued on the security of that property, unless they follow the first mortgage bonds. The whole transaction is a matter of record. The creditor knows exactly what the value of the security is. On the other hand, a company with a surplus of $1,000,000 over interest charges may place its indorsement on a series of bonds issued by other companies whose stock it has acquired. These guarantees, if the borrowing companies do not prosper, may steadily shrink in value, as the margin between the amount which the guarantor may be obliged to pay under its indorsement, and its surplus income from the stocks of its subsidiaries, is reduced. The company with a surplus of $1,000,000 may assume the contingent liability of a guarantor up to $100,000 a year, and the bonds will be good aside from the earning power of the property which directly secures them. When, however, these guarantees aggregate $600,000 or $700,000 a year, the investor must look more closely into the condition

of the borrowing companies, and must place correspondingly less reliance upon the security offered by the indorsement. There are some companies, such as the American Water Works Company, which have indorsed enormous amounts of bonds, and which are continually offering additional issues with the argument that they are also secured by indorsement. So far as the value of the guarantee extends, however, it is a question whether this unlimited indorsement is not a source of weakness rather than strength.

This objection to the security of a guarantee can be easily met, however, by including in the indorsement an obligation of the guarantor to limit his contingent liability. If, for example, his surplus earnings are $500,000 a year and he assumes a contingent liability to pay $250,000, it may be provided in the indorsement that no additional guarantees will be assumed by the indorser until the surplus earnings have reached $1,000,000. By preserving a safe margin between the payments which may be required by the contingent liability, and the surplus earnings out of which these payments must be made, the security of a guarantee may closely approach the security of a mortgage.

Note.—Since the above was written in 1910 the danger of relying upon the guarantee has been illustrated by the failure of the American Water Works and Guaranty Company, a failure due to the extension of the Company's operations by guaranteeing the bonds of certain irrigation companies which proved unprofitable, and forced the guarantor company into bankruptcy.

CHAPTER XXVI

THE COLLATERAL TRUST BOND

THE method of financing new construction by the sale of bonds of subsidiary companies guaranteed by the parent company is advantageous only for strong corporations. Small issues of subsidiary company bonds with the additional security of a guarantee, when the guarantor is not abundantly able to meet all these contingent obligations without calling upon the issuer of the guaranteed securities, are not popular. One of the main reasons for issuing first and refunding or first and general lien bonds is to offer the investor a large issue and a direct obligation. It is increasingly difficult to sell the bonds issued by small companies.

When it is impossible or inexpedient for a company to issue first mortgage bonds, and unless it is of the first rank, so that its guarantee carries conviction, its best method of obtaining new funds is to issue its own debenture bonds secured by the deposit of stocks and bonds of subsidiary companies to which it makes advances for construction purposes. These bonds have already been described as collateral trust bonds. The value and the salability of these bonds depends not so much upon the earnings of the subsidiary company whose securities are pledged, as upon the solvency of the company which issues the obligation. It is not usual to issue collateral trust bonds secured only by the stocks and bonds of a single company. A number of issues of subsidiary companies are usually combined to furnish security for a large issue of the parent company's bonds.

One of the first cases where this method was employed

was by the Union Pacific in 1879. In 1873, in order to protect the second mortgage lien of the government to secure these advances in aid of construction, a law was passed prohibiting the Union Pacific from increasing its bonded debt. Any additional property which it might acquire must come under the lien of this second mortgage. As a result, the Union Pacific could build no branch lines nor extensions. It was necessary to build this additional mileage through subsidiary companies. The Union Pacific advanced the money for construction out of its current earnings, receiving the capital stock and first mortgage seven per cent bonds of the construction companies. To reimburse its treasury for these advances, the Union Pacific pledged these first mortgage bonds as collateral security for an issue of $7,000,000 of six per cent bonds.[1] In 1882, a second collateral trust issue was made by the Union Pacific for a similar purpose. Other railway companies which have made large use of the collateral trust bond in aid of construction are the Missouri Pacific, the Rock Island, and the Louisville & Nashville. A collateral trust bond secured by a lien upon the first mortgage bonds of subsidiary companies gives greater security than the contingent liability of a guarantee, since it is a direct obligation of the parent company. It is, however, inferior to the lien of a first mortgage, since a foreclosure of the collateral trust mortgage places the creditor in possession of other bonds, which necessitates additional foreclosure proceedings before he can get at the property which is the object of his search.

Collateral trust mortgages contain a number of safeguards designed to preserve the value of the collateral. When the security consists of bonds, it is stipulated that no more bonds of equal rank shall be issued by the subsidiary company, even though the subsidiary company's mortgage authorizes additional issues. To this end, the company owning the stock of the subsidiary company is required

[1] Thomas Warner Mitchell in the *Quarterly Journal of Economics*, vol. xx, 1905–06, p. 443.

to deposit this stock, or a controlling interest therein, with the trustee to make sure that the directors of the subsidiary company will not exercise their right to increase the issues of the bonds, and so weaken the value of the collateral trust bonds. This precaution may be considered unnecessary when, as is usually the case, whole or controlling interests in the stocks of the subsidiary companies are owned by the parent company, but it must be remembered that such safeguards are designed primarily for the protection of the bondholder whose interests might be jeopardized if the directors of the parent company should hypothecate treasury assets for some temporary emergency.

Greater care is taken in the framing of collateral trust indentures to protect the value of stock collateral than is necessary in case of bond collateral. The trust indenture securing the Northern Pacific-Great Northern-Chicago, Burlington & Quincy Collateral-Trust Bonds, contains a number of precautions of this character. The railway companies which acquired by the issue of these bonds about ninety-eight per cent of the stock of the Burlington, agree with the trustee that, in case there shall be issued any additional shares of the Burlington stock, except only treasury stock reserved for bond conversion, then the railway companies will assign to the trustee ninety-eight per cent of such additional capital stock. They bind themselves not to distribute any part of the surplus of the Burlington existing on July 1, 1901, since such a distribution would weaken the value of the stock. They agree also that they will cause all necessary repairs, renewals, and replacements to be made out of the earnings of the Burlington lines; that they will not permit the execution by the Burlington of any lease of any of the railways in its system unless such lease shall be made subject to termination by the Burlington, if the shares of the stock held by the trustee shall be sold in case of any default; and finally that they will not permit the sale of any part of the property of the Burlington, unless ninety-eight per cent of the proceeds of the sale is deposited with the trustee as security for the bonds.

Collateral trust bonds differ from call loans with collateral security in that they usually contain no provision for the substitution of collateral. We have seen that mortgages securing bonds by liens on real property allow directors, with the consent of the trustee, to sell any part of the property for which they have no further use, provided only that the proceeds of this sale be reinvested in place of the property withdrawn. The security of stock or bond collateral is, however, by no means so substantial as that furnished by the pledge of real property. Especially when the bonds run for a long term, the substitution of other collateral for that originally deposited is usually considered to give too much latitude to the borrowing company.

It is, however, possible to include the privilege of substituting collateral under adequate safeguards. An illustration of this method is furnished by the mortgage securing the four per cent refunding twenty-five-year gold bonds of the Oregon Short Line Railroad Company dated December 1, 1904. These bonds were secured by the capital stock of the Northern Securities Company, the Southern Pacific Company, and the Oregon Railroad and Navigation Company. Article 6 of the indenture allows withdrawal of the pledged securities and the substitution of collateral. Withdrawal may be made up to eighty per cent of the value of these securities ascertained by appraisement at the time of their delivery to the trustee. Section 2 authorizes the substitution of the stocks of securities of railroad, steamship, or terminal companies for collateral placed under the mortgage to a value equal to the value of the securities withdrawn. The method of appraisement is for two appraisers to be appointed representing the railroad company and the trustee, respectively, and for these appraisers to choose a third whose judgment as to the value of collateral is to be final.

The collateral trust bond is employed for a variety of purposes in addition to the financing of construction by subsidiary companies. A company whose only property consists of the stocks and bonds of other companies is usually

limited to the collateral trust bond. The bonds issued by the large industrial corporations organized in the form of holding companies, whose chief assets consist of the stocks of a number of subsidiaries, furnish numerous illustrations of this method. In such indentures, either the stocks of subsidiary companies can be pledged under the mortgage, or the subsidiary companies themselves, in return for funds advanced to them by the parent company, can execute their own mortgage bonds, and turn these over to the parent company to be deposited under the collateral trust indenture. The precaution usually taken is to have all the securities, both stocks and bonds, of the subsidiary companies deposited under the indenture, and to provide in the mortgage that the parent company, in return for any advances which it may make to the subsidiary companies out of the proceeds of the collateral trust bonds, shall obtain from the subsidiary companies, and shall deliver to the trustee suitable evidences of indebtedness to furnish additional security under the collateral trust mortgage. Should default occur, the holder of the collateral trust bonds comes into the possession of bonds or notes of the subsidiary companies secured by direct liens on their property.

The collateral trust bond is also employed by corporations to acquire the stock of some other company which, when pledged as security for an issue of collateral trust bonds, furnishes the means for its own purchase without seriously taxing the credit of the purchasing company. Collateral trust bonds are, as already explained, plain obligations of the issuing company. They are promissory notes which, when issued by a solvent corporation, have a value apart from any special security which may be deposited. In order to give them greater currency and value, however, the stock of a company which has been purchased may be deposited as collateral security, in this manner providing the funds for its own purchase. Familiar examples of this use of the collateral trust bond are furnished by the Great Northern-Northern Pacific, Burlington Joint 4s already referred

to; also by the issue of collateral trust three and a half per cent bonds by the New York Central, in 1897 to purchase the stock of the Lake Shore & Michigan Southern, and Michigan Central Railroad Companies.

In each of these cases, the stock security placed under the collateral trust bonds of the purchasing company has produced a revenue at least equal to the interest on the bonds, so that the income accounts of the parent companies have not been drawn upon, save temporarily, to pay interest on the collateral trust bonds. The credit of the parent company is, therefore, kept intact for the issue of other debentures for other purposes. With bonds amply secured by stock collateral, the investor does not consider the obligation as a burden upon the finances of the parent company. At the same time, however, the surplus earnings of the parent company stand back of the bonds to reassure any holder who may be uncertain of the value of the collateral security. For example, the Great Northern-Northern Pacific, Burlington Joint 4s have an interest charge of $8,000,000. The Burlington pays each year $8,000,000 in dividends, and earns far more than this amount, producing a considerable surplus over all interest charges. Besides this, however, the two purchasing companies had surplus earnings in their last fiscal year over their fixed charges amounting to $37,800,000, nearly five times the interest charges on the joint 4s.

When collateral trust bonds are issued by companies whose principal assets consist of the securities pledged under the lien of the collateral trust indenture, then the investor looks mainly to the value of the collateral, and the price of the bond fluctuates with the fortunes of the company whose stock furnishes its sole security. An illustration of a bond with no other security than stock is furnished by the collateral trust 4s issued by the Chicago, Rock Island, Pacific Railroad Company of Iowa, a company whose sole assets consist of the stock of the Chicago, Rock Island, Pacific Rail*way* Company of Iowa. During 1909, the price of the bonds

showed an extreme fluctuation of nine and one half per cent. The bonds are highly speculative, since their interest must come solely from the dividends paid by the Chicago, Rock Island and Pacific Rail*way* Company.[1] During the same year, however, the Burlington Joint 4s, whose interest absorbs a much greater proportion of the dividends on the Burlington stock than that proportion of the Rock Island Railway dividends which is required to pay interest on the collateral trust bonds which its stock secures, fluctuated only four per cent. The smaller fluctuations of the Burlington Joint 4s as compared with the Rock Island bonds show the high standing which collateral trust bonds issued by strong companies possess. At the same time, as already shown, unless the company issuing the collateral trust bonds secured by dividend-paying stock is obliged to make up the difference between the interest on the bonds and the dividends on the stock securing them, its credit is not seriously weakened by the issue of collateral trust bonds.

When such advances have to be made, however, as for a time was necessary in the case of the Atlantic Coast Line —Louisville & Nashville collateral 5s—the attention of the investor is directed to the nature of the collateral trust bonds, the direct obligation of the issuing company, altogether apart from the stock security underlying it. The existence of collateral trust bonds in such an event operates to subtract from the borrowing power of the issuing company, perhaps more than might be expected from the extent of this deficit between the dividends on the collateral stock and the interest on the bonds. The liability of the issuing company is then regarded in much the same light as the contingent liability of a guarantee when the borrowing company is not earning its interest and must call upon the indorser of its bonds to make up the deficit.

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[1] Largely due to the diversion of earnings to pay interest on bonds issued to purchase the stocks of various railway companies, the Chicago, Rock Island and Pacific Railway was this year, 1915, placed in the hands of receivers.

CHAPTER XXVII

BONDS SECURED BY THE ASSIGNMENT OF A LEASE

ANOTHER method of securing capital in the face of a closed first mortgage is by the use of the lease as security. The detailed discussion of the lease is postponed to a later chapter. At this point it is sufficient to define the lease as a contract by which the possession of property is transferred by the owner, known as the lessor, to some other person or corporation, known as the lessee, the title of the property remaining in the lessor but the lessee being allowed its possession and use under certain conditions set down in the lease.

The lease is largely used by railroad companies to borrow money for the purchase of equipment under a form of obligation, known as the car trust certificate, by which the property acquired serves as the security for the bonds, and which are also the direct obligations of the railroad company. This method of borrowing may be illustrated by the issue of the Lehigh Valley Car Trust Certificates, Series G. A syndicate, headed by E. T. Stotesbury, a leading Philadelphia banker, was organized to purchase and pay for a large number of passenger and freight cars. E. T. Stotesbury then executed an agreement whereby, in return for certain payments, and on the basis of certain covenants and stipulations, he leased to the railroad company from October 25, 1902, to August 1, 1910, the equipment which he had purchased, and which is carefully enumerated and described. The Lehigh Valley Railroad Company, for its part, in return for being allowed the use of the cars, agreed to pay $203,398.80 before the equipment was

delivered to them and half yearly the following sums: First, a sum equal to $2\frac{1}{4}$ per cent on \$800,000 to be reduced from time to time by $2\frac{1}{4}$ per cent on money paid by the railroad company in reduction of \$800,000. Second, a sum equal to all expenses incurred by the lessor in enforcing the covenants and terms of the lease. Third, a sum equal to the taxes which the lessor might be liable to pay. Fourth, yearly the sum of \$100,000, making in all eight annual payments of \$100,000 each.

The deferred payments were evidenced by equipment notes the substance of which is as follows:

> The Lehigh Valley Railroad Company hereby acknowledges itself to be indebted to the bearer, or registered owner hereof, in the sum of \$1,000 with interest at the rate of $4\frac{1}{2}$ per cent per annum. This certificate is one of a series of 800 for \$1,000 each issued under the terms of a lease bearing date of the 25th day of October, 1902, between E. T. Stotesbury and the Lehigh Valley Railroad Company.[1]

In addition to these payments, the railroad company agrees with the lessor to keep the cars in good repair, to replace any which may be destroyed from any cause, to mark the name of the owner plainly upon the cars, and to furnish him each year a list of the equipment, not to sublet the equipment, and, in case of default under any of the provisions of the lease, to deliver to the lessor the equipment to which the lease relates. The lessor on his part agrees that after the payments have been completed, he will upon the payment by the railroad company of the additional sum of one dollar, transfer to the railroad company, as its absolute property, all the railroad cars held under the lease. The rental referred to in this agreement consists of three parts: First, a sum of cash which is usually considered to represent the expenses and profits of the syndicate acquiring the equipment; second, a sum which represents the purchase

[1] Only the essential portions of the Car Trust Certificate are given.

price of the equipment payable in installments; and third, interest on the unpaid installments of the purchase price.

E. T. Stotesbury, having now purchased the equipment, and having leased it to the Lehigh Valley, assigns the agreement as security for the certificates evidencing the deferred payments under the lease, to the Girard Trust Company substantially as follows:

> First, that the said E. T. Stotesbury hereby assigns unto the Girard Trust Company as trustee for the holders of the certificates hereinafter set forth, all the right, title and interest of said E. T. Stotesbury in and to a certain indenture of lease bearing even date herewith made by the said E. T. Stotesbury to the Lehigh Valley Railroad Company.
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> Second, the said trustee covenants and agrees that it will certify and deliver to Drexel & Company (*for whom Stotesbury is acting*)[1] for distribution to the several subscribers to the said Lehigh Valley Car Trust Fund eight hundred certificates in the following form (*given above*),[1] which certificates shall be delivered in amounts and at times corresponding to the value and the time of delivery of the various lots of said railroad cars by the said E. T. Stotesbury to the Lehigh Valley Railroad Company. All of which certificates, when and as issued, shall be entitled to the security of all such railroad cars previously and subsequently delivered by said Edward T. Stotesbury to the Railroad Company under the terms of said indenture of lease of even date herewith.

These certificates were numbered consecutively from one to eight hundred and were payable in eight installments beginning August 1, 1903.

The agreement for assignment of lease, to which the Lehigh Valley Railroad Company is made a party, provides in detail for the protection of the holders of these certificates by the trustee. In case of any default in the payments under the lease, or the breach of any other covenant by the railroad

[1] Italics are the author's.

company, the trustee is authorized to retake possession of the cars, and to hold, or lease, or to otherwise dispose of all or any part of the equipment in such manner as it may deem beneficial, and also to recover from the company, for future accruing rent, any deficit which may remain after the sale or lease of the equipment, and the application of the proceeds to the claims of the certificate holders.

From the foregoing, the strong position of equipment trust obligations is evident. They are, in fact, debenture bonds of the railroad, with the additional security of a first mortgage upon railway equipment. They have the further advantage, explained in a former chapter in connection with the discussion of serial bonds—that their margin of security constantly increases, since the equipment is in existence at the time the last bond matures. Equipment trust obligations usually bear higher rates of interest than first mortgage bonds issued for long terms. They also yield higher returns to the investor than first mortgage bonds, while the security which they offer is practically perfect.

The Guarantee Trust Company of New York, in a circular dealing with the advantages of the equipment trust securities, summarizes these advantages as follows:

"The equipment of a railroad corporation is essential to its operation. It is the tool with which the railroad handles its business. If an individual mechanic becomes bankrupt, his tools are ordinarily exempt from seizure on the ground that possession of the tools is necessary for the mechanic to obtain his livelihood and ultimately satisfy his creditors. In the same way the courts, both State and Federal, have ruled that the necessary equipment of a railroad must be preserved for the Receiver of a bankrupt railroad in order to enable him to operate the railroad; and have generally placed the charges of principal and interest of equipment obligations upon an equality with charges for wages, materials and other operating expenses, and in priority to interest of even first mortgage bonds."

The record of equipment obligations issued by railroad companies which have subsequently gone into bankruptcy confirms this favorable judgment. With few exceptions the principal and interest on equipment bonds have been paid in full even by companies where all other bonds were reduced in interest or principal. This strong position of equipment bonds in bankruptcy is due to the fact that their security is not the property of the bankrupt corporation. The cars and locomotives which they represent are the property of another who has leased his equipment to the railroad company on certain definite conditions. Unless these conditions are met, the equipment can be hauled off the company's lines and sold. Property which is owned by the company can, as we shall see in a later chapter, be put out of reach of creditors, within the protection of the court. The court, however, can have no jurisdiction over property not belonging to the bankrupt corporation. The receiver, no matter if he defaults on the first mortgage bonds, must pay the interest on the equipment trust obligations.

The equipment trust bond represents the most familiar use of the lease as a means of obtaining new capital. Another method often employed is to organize a subsidiary company in the interest of a company desiring to obtain capital. This subsidiary company constructs or purchases the equipment or other property needed by the parent company, issuing for the purpose its own first mortgage bonds which may be guaranteed by the parent company. The property is then leased to the parent company for a rental sufficient to pay the interest on the bonds and to retire their principal after a term of years. In some cases, the rental is made sufficient to pay dividends on the stock of the subsidiary company. After the bonds of the subsidiary company have been retired, the property, upon the payment of a nominal sum, passes to the parent company. For the greater portion of bondholders, it is customary for the subsidiary company, in such a case, to assign the lease, out of which the money to pay the interest on the bond must come, to the trustee. If the rental

is not paid, then the interest cannot be paid, the bonds are in default, and their holders can bring foreclosure proceedings. The trustee can sue the lessee company either upon its obligation of guarantee, in case it has indorsed the bonds of the subsidiary company, or under its contract of lease.

A third use of the lease as security is by the lessee company. The lease, being a contract for the use of certain property on the payment of certain stipulated sums, may be expected to show a surplus over the amount of the rentals. This surplus makes the leasehold interest, the value of the annual profits of the lessee, a valuable right which can be pledged by the lessee like any other thing of value as security for bonds. This form of security was employed by the Interborough Company which pledged its 999 year lease of the Manhattan Railway and its subway lease from New York City as the main security of $55,000,000 of mortgage bonds dated November 1, 1907. The Interborough, from the operation of these leased lines, in 1909 showed a large surplus over rentals, so that its leasehold interest represented a valuable property, furnishing ample security for a bond issue. It is unusual, however, to find leases showing such large earnings. While the leasehold interests are frequently conveyed as supplementary security to trustees, they are not often given a prominent position as a basis of bond issues.

Note.—An exception to the rule that equipment obligations have been cared for in receiverships is furnished by the Detroit, Toledo and Ironton. In April, 1909, the equipment covered by the $1,656,000 Equipment Trust 4½s of 1905 was surrendered to the trustee and sold at auction for $1,200,000, the holders of the bonds becoming the owners.

CHAPTER XXVIII

CONSOLIDATION OF CORPORATIONS

THE consolidation of corporations offers a means of obtaining new capital without the necessity of providing funds for construction or purchase. It also enables companies to abolish or restrict competition and in this way to increase profits. In 1901, the Reading Company desired to obtain permanent possession of sufficient terminal facilities in New York. The Central Railroad of New Jersey possessed these facilities. The consolidation of the two companies gave the Reading the use of the valuable terminals of the Central Railroad of New Jersey in perpetuity. Numerous illustrations of the advantages of consolidation in restricting competition are furnished by the industrial trusts. These advantages have been fully discussed in a preceding chapter.

The methods of uniting corporations by consolidation are three: First, the merger; second, the purchase by one company of a controlling stock interest in another; third, the lease.

When a merger of corporations is accomplished, one or more of the companies concerned loses its identity in another. Suppose the case of two gas companies—A and B—competing for the business of the same town. A sufficient amount of the stock of B has been required in the interest of A, to control the sale of its assets and its dissolution. Two methods are available for merging B with A. A may offer its stock or bonds or cash in exchange for the stock of B, having acquired the amount of stock which by the laws of the state or the charter of B is necessary to assent to the

disposition of B's assets. The directors of B now sell the property of that company to A. If all the stock of B has been acquired, the consideration need be only nominal. A now controls all the stock of B, and secures the dissolution of B, in the manner provided by law. The second method is for A to purchase the property of B, at its market value in securities or cash. B has then in its treasury the proceeds of the sale. B is then dissolved and the directors distribute its assets to its stockholders.

The method of merger is seldom adopted. There is usually some advantage to a company acquiring control of another company, in continuing the corporate existence of its subsidiary. Companies which have been in existence a sufficient length of time to establish a reputation have a certain good-will value in connection with their name which would terminate if their corporate existence were ended. Valuable privileges may also be lost if the method of merger is adopted. For example, the Boston Consolidated Gas Company, where the price of gas is fixed by law at eighty cents per thousand feet, owns stock of the Quincy Gas Light Company, the Chelsea Gas Light Company, and the East Boston Gas Light Company. In Chelsea and East Boston, where the population is not so dense as in Boston, the legal price of gas is $1 per thousand feet. In Boston the cost of distributing gas is less and the profit even at the lower price is greater. If the large lighting companies were merged with the consolidated company, the eighty cent rate would apply throughout the consolidated property. It is desirable, therefore, to maintain the corporate existence of these outside companies in order to secure the $1 rate in the suburbs. In consolidations of street railway companies possessing perpetual franchises, care is taken to preserve the corporate existence of the companies owning these valuable franchises.[1] There is no serious disadvantage in maintaining separate existences for corporations controlled by other companies. The salary ac-

[1] Lecture by F. E. Snow to Harvard School of Business Administration, Jan. 15, 1909.

counts of the subsidiary companies are nominal and the operation of their property can be merged if desired by leasing their property to the main system, or by operating them as divisions or departments of the parent company.

The second method of consolidation is that of stock ownership. One operating company can purchase the stock of another, giving in exchange cash or securities, or a company can be organized for the purpose of holding the stocks of other companies which by this device are brought under centralized control. How much stock is it necessary for a company to acquire to control another? The rule of law is that, in the absence of a provision allowing stockholders to accumulate their votes on one or two directors, thus insuring to the minority representation on the board, a bare majority of the stock can elect, if the owners wish, all the directors. While the rights of the majority are seldom pushed to this extreme, yet the holders of a majority of the stock always demand, with propriety, a substantial majority of the board of directors. There is no general reason, therefore, for acquiring ing all the stock of a corporation in order to control it.

Where the interest of the parent company may be opposed to the interest of the subsidiary company, there is no alternative, if it is desired to maintain the identity of the subsidiary, save for the parent company to acquire all of its stock, or to see that its control is held in the parent company's interest. Many of the consolidations of manufacturing concerns have resulted in the closing of badly located or otherwise unprofitable mills in order to concentrate the production in plants which are better equipped or more favorably situated. This policy makes for the interest of the parent company. It is, however, directly opposed to the interests of minority stockholders of the corporations owning the plants whose operation is discontinued. If their business were to be closed up in this manner, the minority stockholders would undoubtedly appeal to the courts which would give them effective protection against the depreciation in the value of their shares which would follow the suspension of

dividends on their stocks. To avoid trouble of this character, it is usual to secure all the stock of the company to be consolidated, in case this can be purchased at reasonable figures.

If all the stock cannot be acquired, and in case the subsidiary company is to be exploited for the benefit of the interests which control it, the method which has been employed in some cases is to guarantee a dividend on the minority stock of the subsidiary. This plan was followed by the Carnegie Steel Company in 1901 in guaranteeing four per cent on the minority stock of the Pittsburg, Bessemer & Lake Erie Railroad Company, whose principal freight, since its organization in 1897, had been ore destined for the Carnegie furnaces. The minority stockholders of the railroad company complained that their failure to receive dividends was due to the fact that the owners of the majority of their stock of the Carnegie Steel Company received such low rates on its ore that the railroad company was unable to make a profit. In order to quiet this criticism, the Carnegie Steel Company, through a subsidiary company, the Bessemer and Lake Erie, guaranteed a dividend on the stock, leaving itself free to fix rates as low as it thought best.

An exception to the rule that all the stock of a company, control of which is desired by another company, should be acquired, is furnished by large public corporations, such as railroad companies, where the object of the consolidation is merely to secure uniformity in rates or to arrange interchanges of traffic which will be mutually profitable. Here there is no temptation to the exploitation of one company by another, and the minority stockholders have no reason to feel aggrieved. Where the stock of a company is widely scattered, moreover, a controlling interest may be much less than a majority. The Pennsylvania Railroad Company for seven years exercised a potent influence in the directorates of the Baltimore & Ohio, the Chesapeake & Ohio, and the Norfolk & Western. At no time, however, did it own a majority of the stock of any of these companies. Any contest for control, however, during the period of the Pennsylvania's in-

fluence, would have been hopeless, owing to the control of the administrative machinery of these companies in the interest of their principal stockholder, and to the advantage which this control would have been given these officers in soliciting voting proxies.

Having settled upon the amount of stock required for control, our next question concerns the method by which this stock can be acquired. Stock may be purchased for cash, or with the stock or bonds of the purchasing company, or with stock trust certificates on which dividends are guaranteed by the company acquiring the stock. The consideration which will be offered and accepted in the acquisition of a stock control can be viewed from the standpoint of the purchasing company, and also from the standpoint of the individual stockholder. A purchasing company, if its surplus over its regular disbursements is substantial, can safely offer bonds or their cash equivalent to holders of stock which it desires to purchase. Other things being equal, an offer of bonds is desirable. If there is no identical interest represented in both companies to be considered, if the purchaser is in a strong financial position, and especially if there is a prospect that the stock purchased will become much more valuable in the hands of the purchaser, the method of purchase by bonds is likely to be adopted. The stockholders who receive bonds for their holdings surrender all right to future participation in the profits of their company over the amount guaranteed on their bonds. The purchasing company, by giving them a secured claim, succeeds to their right to the increase in profits over the amount paid in interest.

In some cases these purchases of stock with bonds have proven immensely profitable. In 1898 the New York Central purchased $45,000,000 out of $50,000,000 of the capital stock of the Lake Shore, Michigan & Southern, giving in exchange its 3½ per cent bonds at the rate of $200 in bonds for $100 in stock. The seven per cent dividends on the Lake Shore stock represented the equivalent of the interest paid on the

bonds issued in payment. From 1899 to 1903, the Lake Shore paid seven per cent, from 1904 to 1906 inclusive, eight per cent, in 1907 twelve per cent, in 1908 fourteen per cent, and in 1909 twelve per cent. The purchase of the Lake Shore stock has proven most fortunate for the New York Central. Indeed, had it not been for the large profits made on this purchase, the Central would have had much difficulty in maintaining its five per cent dividends during 1909. The joint purchase of the Burlington by the Great Northern and the Northern Pacific has also been profitable, although the purchasing companies have not as yet taken any direct profit into their income accounts out of the large surplus earnings which the Burlington is showing over the dividends necessary to pay interest on the bonds issued to purchase this stock. There is the more reason to adopt the method of purchasing stock with the bonds of the purchaser, if the stock desired is a dividend payer, since then a substantial portion of the interest on the bonds can be provided out of the stock purchased.

When any doubt exists, however, concerning the ability of the purchasing company to meet the interest on a sufficient bond issue to buy the stock which it desires, prudence demands that stock be employed. Cumulative preferred stock gives almost the security of bonds, with the added advantage of a higher return. At the same time, the failure to pay dividends on such stock does not work the bankruptcy of the company. The United States Rubber Company in a circular to its stockholders recommending the purchase of stock of the Rubber Goods Manufacturing Company, stated the argument against bonds and in favor of preferred stock as follows:

"If no better means were provided, it might be advisable to make such purchase by the use of collateral trust notes, but it occurred to the management that rather than subject their stock to the prior fixed charges of such collateral trust notes, the stockholders might prefer to provide the means

of purchase by an increased issue of stock, the preferred stock of the Rubber Goods Manufacturing Company to be acquired by an issue of new first preferred stock of the United States Company in amount equal to that of the Manufacturing Company, and with dividends limited to eight per cent annually."

Even where bonds can safely be employed, the importance placed upon preserving the credit of the purchasing company influences the use of its stock to acquire other stock. The New York, New Haven & Hartford, for example, at the time of its acquisition of the Boston & Maine, could undoubtedly have purchased this stock with bonds. The Boston & Maine stockholders had been in receipt of a seven per cent dividend for many years, and had no reasonable expectation of any higher return. It is not to be doubted that they would have accepted the debenture bonds of the New York, New Haven & Hartford secured by their own stock quite as readily as they received the stock of the purchasing company. By acquiring the Boston & Maine stock with its stock, however, the New Haven & Hartford maintained its credit unimpaired. Any mistake in its calculations as to the increased value which association with the Boston & Maine would confer upon that company's stock, would not damage the credit of the purchasing company, but would fall upon its stockholders.

From the standpoint of the stockholder, the acceptance of an offer for his stock may be influenced by various considerations. If he is not satisfied with the prospects of his own investment, there is little trouble in inducing him to accept a fair offer. For example, at the time of the formation of the United States Steel Corporation, the Carnegie Steel Company threatened with its competition every one of the large industrials whose stockholders were asked to exchange their holdings for United States Steel stock. The advantages of eliminating this competition, and of being associated in the same company with the strong Carnegie Steel Company, were sufficient to induce a practically unani-

mous acceptance of the offer of the United States Steel Corporation to the stockholders of the separate companies.

If, however, the stockholder is receiving good dividends and is not apprehensive of their discontinuance, strong inducements are usually required to persuade him to sell. Instances are not lacking where stockholders have given up dividend paying stock in return for stock which paid them nothing. A case in point is that of the Atlantic Transport Company, whose stockholders went into the International Mercantile Marine Company, exchanging their stock, on which they had been receiving regular dividends, for the stock of a large company on which they have received nothing. With a weak company or a new company offering to purchase, and especially when a corporation is organized with the sole purpose of acquiring the stocks of other companies, unless there are strong reasons urging consolidation, and unless bonds are not available, stock will not, as a rule, prove attractive. The stockholders demand either collateral trust bonds secured by the stock purchased, and with the provision in the indenture that in case of default the bonds can be employed to purchase the stock, or they demand cumulative preferred stock bearing a high rate of dividend. By the stockholders of the strong companies comprising the trusts, a bonus of common stock in addition was usually exacted.

As a compromise between the stock and the bond, a company purchasing stock may employ the stock trust certificate. In 1909, for example, the Minneapolis, St. Paul & Sault Ste. Marie Railroad Company acquired most of the preferred stock of the Wisconsin Central with its leased line stock certificates secured by a deposit of the stock purchased, on which four per cent is guaranteed for ninety-nine years. These stock certificates do not differ essentially from a collateral trust bond. In case of default, the holders of the certificates receive back the stock from the trustee and can sue for unpaid dividends. The obligation of the certificate is, however, a contingent obligation, and on that account is more acceptable to the stockholders of the purchasing company.

No matter what form of consideration is offered for the stock, the acceptance of the offer is not certain. Some stockholders will always be found to demand cash for their holdings, and some there are who will not sell at any price. This situation necessitates the usual employment of the underwriting syndicate in such transactions, which guarantees the provision of the cash required, and, in some cases, guarantees the delivery of the amount of stock necessary. The official circular announcing the joint offer of the Great Northern and the Northern Pacific to purchase the stock of the Chicago, Burlington & Quincy stated that "The purchasers will pay cash instead of bonds to an amount not exceeding in the aggregate $50,000,000 to those shareholders who shall prefer to receive payment partly in cash; and J. P. Morgan & Company, as managers of a syndicate, have undertaken to provide such cash, and to take therefor such bonds at par and accrued interest. You are accordingly offered the privilege of selling your stock at $200 per share, payable wholly in the four per cents described above, or in bonds to the amount of $160 and cash to the amount of $40."

Another precaution usually in such offers is to make the offer contingent upon its acceptance by a certain percentage of the stockholders to whom it is made. The offer just referred to was for not less than two thirds of the stock of the Burlington. When the syndicate guarantees the delivery of a certain amount of stock, a buying campaign is usually the preliminary feature of the transaction. Preceding the purchase of the Burlington stock, and also preceding the Rock Island consolidation, the stocks of these companies showed a large increase in value, owing, it was believed, to the operations of the syndicates interested in promoting the consolidation. The purchasing company can, of course, take no official part in this buying campaign, however essential though it may be to the execution of its designs. The company would not be justified in using its funds in buying stock for which it might have no use. The profits of syndicates under these circumstances, although severely criticised,

have been defended on the ground that in no other way could the delivery of the amount of stock required be insured than by allowing the syndicate to make what profit they could in purchasing the stock below the figure at which, as they are informed, the company for which they are acting is prepared to purchase it.

CHAPTER XXIX

THE HOLDING COMPANY

THE holding company is a corporation organized for the purpose of acquiring the stocks and other securities of other corporations. These securities are acquired either by direct exchange of its own stocks and bonds, or by their sale for cash which is used to purchase the securities desired. The ownership of the stocks of various companies gives to the holding company the right to elect their boards of directors and to completely dominate their policy, thus accomplishing a combination between them which is as perfect as though the different corporations had merged their existence in that of the company which has acquired a controlling interest in their stocks.

Holding companies are formed both for legal and financial reasons. The primary purpose of forming a holding company is to effect a combination of allied enterprises which cannot be accomplished by the use of any one of the corporations which it is intended to include. The legalization of consolidation has, in most states, been deferred until recent years. If corporations are organized under the laws of different states, there is no method by which they can be directly consolidated. We have already referred to the formation of the trusts. These companies have been generally organized by means of holding companies formed under the laws of the State of New Jersey. The conditions out of which this device for consolidating competing enterprises developed will show in detail the principal legal reason for the use of the holding company.

Many attempts had been made before 1898 to lessen the recognized evils of competition. These attempts had usually taken the form of pools, many of which, especially in the iron and steel trades, were organized during the last industrial depression. A pool is a voluntary association of sellers who place the marketing of their product under some central control or general restriction. The primary object of such agreements is to secure profitable prices, either directly or by means of payments from a central treasury, to the members of the association. The methods by which these profitable prices have been secured are in general as follows: (1) The output of the mills included in the association is restricted, so that prices can be advanced by the limitation of supply; and (2) the buyer is held to the regular quotations, and is unable, by playing off one competitor against another, to obtain special concessions. The pool may go further than the regulation of prices and output; it may secure favorable terms on material purchased; it may deal as an association with railroads to obtain such concessions as are granted to large shippers, and it may assist its members in dealing with organized labor. As a general proposition, however, the purpose of a pool is to regulate production and control prices, leaving the details of management to the separate companies.

The pool is usually organized with a central governing or advisory body which conducts all routine business, and receives and distributes the funds of the organization. A matter of such importance as a change in prices would generally be decided at a meeting of all the members of the association, or by some executive committee composed of the larger manufacturers. Within these lines, the pool has assumed a variety of forms.

The Bessemer Steel Pool, which was organized in 1896, furnishes an illustration. This organization included the majority of the producers of crude steel and finished material in the Central West. Every mill was given a percentage allotment which it was allowed to sell—say, 500,000 tons, or one seventh of the total estimated output of the association.

At the end of each month the shipments from all the mills were reported to the officers of the pool. If any mill was found to have exceeded its percentage allotment, it was required to pay into the pool treasury $2 per ton of such excess, while an equivalent was paid out of the treasury to those who did not ship their allotment. For example, if the mill which was allotted 500,000 tons sold 700,000 tons, while the sales of another mill fell 200,000 tons short of its allotment, it would receive out of the pool treasury the amount which Mill No. 1 would pay in—viz., $400,000. The existence of this penalty operated to prevent price cutting among the members of the pool. In the Wire Nail Association, which held control of the nail market during 1895 and 1896, the central office fixed prices and assigned to each producer his share of the output, which it was believed could be marketed at the price agreed upon. It often happened in the management of a pool that the output of the association would be produced by a few of the best-equipped or best-situated plants, the owners of the idle plants being paid a certain rental to keep out of business.

The essential weakness of this form of organization is its inability to enforce its agreements. The necessity of voluntary assent on the part of every member of the association, the liberty of each to withdraw on short notice, and the difficulty of establishing relations of mutual confidence among competitors, all unite to emphasize this defect. The members of a pool have long since formed the habit of closely scrutinizing the moves of those in the same business, and even a small misunderstanding often creates a feeling of mutual distrust and apprehension which work the destruction of harmony and the final dissolution of the organization.

The successful management of a pool is peculiarly difficult during a period of business depression, when business at remunerative prices is hard to get. Strong producers at such a time are suspected of attempts to obtain more than their allotted share of orders by methods which are contrary to the spirit, if not the letter, of the pool agreement. For

example, the Bessemer Steel Pool, above referred to, originally applied only to the tonnage of steel billets, ingots, bars, or slabs. The steel which was rolled into merchantable shapes did not count in the allotment. Some of the large producers took advantage of this fact to market as much as possible of their output in the form of finished material, by this method of indirection far exceeding the limits of their allotment, and they could not be penalized for so doing. Such offenses against the pool agreements made their permanent continuance impossible.

The following quotation from the *Iron Age* of December 10, 1896, shows the usual fate of these associations and the results which follow their dissolution: "The Billet Pool, or Bessemer Steel Association of the United States . . . is now in session. . . . The meeting promises to be a stormy one, as there is considerable ill feeling against certain concerns who are charged with having violated the pool agreement. The pool was practically dissolved as soon as the resignation of the Bellaire Steel Company was in the hands of the secretary. There has been an open market on Billets, Sheet and Tin-plate Bars since Saturday morning, and a scramble for business on the part of some mills. Probably 25,000 tons of Sheet Bars have been sold this week at very low prices, the deliveries running up to the close of 1897. There have also been considerable sales of Billets and Tin-plate Bars at low prices."

The prices which follow the dissolution of a pool, when confidence has been destroyed, and when manufacturers are making concessions to secure business, are often even lower than the low prices which had brought the producers together. Before the dissolution of a rail pool, in February, 1897, the price of steel rails at Chicago was $27.50 per ton. Owing to the dissatisfaction of the Lackawanna Iron and Steel Company with its allotment of seventeen per cent of the total output, and its consequent withdrawal from the association, and owing to the demand of the Illinois Steel Company for all territory west of Pittsburg, the pool was dis-

rupted. Steel rails were immediately offered by the Carnegie Company for delivery at Chicago at $17 per ton, a reduction of $10.50 from the pool price. In 1895, for six months before the organization of this pool, the price of rails averaged $21 per ton. After the dissolution of the pool, the price did not again reach this figure until January, 1899. The breakdowns of pooling agreements in the steel trade during the period 1892–98 occurred with such periodical regularity that large buyers were accustomed to wait for the dissolution before making their purchases. After the break in the rail pool in February, 1897, the Eastern sales resulting from the reduction in price amounted to 200,000 tons. The Illinois Steel Company in the West booked orders amounting to $5,000,000. The railroads hastened to load up the rail mills with large orders, often for delivery eighteen months in the future.

Not only were the pool agreements unstable, but their regulation of prices was frequently very foolish. The determination of the policy of a pool is, in most cases, a question of majority rule, and the majority of producers in any trade are unlikely to be possessed of a broad grasp of business situations, or to be able to see further than the immediate future. When they found themselves in control of the supply, the various associations frequently raised prices to figures which seriously interfered with demand and which stimulated immediate and general competition. The policy of the nail pool above referred to offers a good illustration of this tendency to extortion. In the face of a general decline in prices, and a severe depression affecting every important industry, the price of a keg of wire nails was increased from 87 cents to $2.55, a rise of almost 200 per cent, and this high price was maintained for six months.

The *Iron Age* characterized this policy as follows:

"Looking at the matter even from the manufacturer's standpoint, it would seem the part of wisdom to have put the price of nails at a reasonable figure rather than attempt to maintain a price which in the very nature of things must

be temporary, and may, perhaps, end in disaster. Only those in close touch with the trade are aware of the influence which the policy of the association has in encouraging the establishment of new plants, whose competition must be troublesome, while at the same time it invites the importation of foreign nails. . . . The trade are aware that the present price of nails is abnormally high as a result of agreement between the manufacturers—so high, in fact, that it is constantly under suspicion. The trade will doubtless continue to limit their purchases to their imperative requirements so long as nails are held at their present figures."

Pooling agreements among manufacturing competitors are inherently defective. They have no firm basis in mutual confidence. They usually result in such an unreasonable increase of prices as to check consumption and stimulate competition. In few cases have they been productive of more than a temporary advantage in profits to their members.

The "Trust" movement of the eighties promised a more satisfactory restriction of competition. In this form of organization, agreement among manufacturers as to prices and output was secured by depositing the stocks of the constituent companies with trustees in exchange for trust certificates. These entitled the holders to such dividends as might be declared on the stocks, and also empowered them to vote for the trustees in the same manner as the stockholders of a corporation elect their directors. The trust certificates, moreover, could be dealt in on the stock exchanges in the same way as the certificates issued by the voting trust of a corporation. The trustees, being in control of the stock of the several corporations included in the trust, directed the management of these companies, and secured a uniform policy upon prices and output. Permanence of control was secured by making the transfer of stock to the trustees, except by the formal dissolution of the trust, as provided for in the articles of association, irrevocable.

The trust, so far as it included former competitors, furnished a more satisfactory restriction of competition than

the pool. It was open to fewer objections; its organization was permanent; its government was centralized, responsible, and representative. The control of the constituent corporations by the central organization—the trustees—was complete, for the trustees elected the board of directors of each of the constituent companies. Because it was permanent and centralized, the trust pursued a more enlightened policy as to prices than the pool. The Standard Oil Trust made a considerable reduction in the price of refined petroleum, and the Sugar Trust, although for some years in practical control of the market, did no more than to restore prices to a living basis. The Whisky Trust attempted to charge excessive prices, but the complete failure of its attempt, owing to the growth of competition, justified the wisdom of the more conservatively managed organizations. The Cotton Oil, Linseed Oil, and Lead Trust showed no disposition to practice extortion upon the consumers of these products. The trust, as a device for the control of competition, was satisfactory. Its legal position, however, was inherently defective.

Beginning with the Granger agitation against the railroads in 1870, there had grown up throughout the United States a pronounced sentiment against monopoly, understanding by monopoly any attempt on the part of a railroad or manufacturing corporation to increase rates or prices by reason of its control of a particular market. The laws of most of the states forbid monopoly. Many state constitutions contain similar provisions. In 1890, sixteen states, either in their constitutions or by statute, prohibited any combination in restraint of trade; and the common law, which was generally applicable throughout the states, also forbade any combination of this nature. The antitrust law of Missouri, for example, prohibited any "pool, trust, agreement, combination, confederation, or understanding with any other corporation, partnership, individual, or any other person or association of persons, to regulate or fix the price of any article of manufacture." In 1890, Congress passed the Sherman

Antitrust Act, which declared that "every contract, combination in the form of trust, or otherwise, or conspiracy in restraint of trade or commerce among the several states or with foreign nations, is hereby declared to be illegal." This legislation was backed up by a vigilant public opinion rancorously hostile to large corporations. It was not to be expected that the trusts would long survive in such an unfriendly atmosphere.

The pool was also specifically designated by most of these statutes as an unlawful combination, but the pool was a secret agreement whose details were not a matter of record and against which it was difficult to secure evidence. The Addystone Pipe and Tube Company is the most conspicuous case of the dissolution of a pool by legal process, and here the evidence against the organization was only secured through information given by a disaffected stenographer. That such pools existed was common knowledge, but to obtain conclusive evidence was difficult.

The trust, however, which was a permanent pool, and which was expected to realize the benefits of the pool while avoiding its mistakes, lay open to attack. The trust agreements were matters of record. Their organizations were made under the usual legal forms, and the details of these organizations could not be concealed. The trustees could not refuse to disclose their authority for issuing the trust certificates which were dealt in on the exchanges. Any stockholder could enforce his right to examine the constitution and working of the trust which held his property. Neither could the fact be concealed that these corporations, whose identity and active life had been preserved, were, under the trust agreement, no longer masters of their own actions. They had surrendered their delegated powers to the trustees. A perfect "combination in restraint of trade" had been effected, and in view of the manifold statutes prohibiting these self-evident combinations, the dissolution of such combinations waited only for an attack upon their right to exist.

The attack came in 1890, when the Attorney-General of New York brought suit against the North River Sugar Refining Company under the common law. The case was decided against the company, not only on the ground as stated in the opinion of the Circuit Court, that the North River Sugar Refining Company was a combination . . . "the tendency of which is to prevent competition in its broad and general sense and to control, and thus at will enhance, prices to the detriment of the public, . . . but because the corporation, entering the trust, had exceeded the powers of its charter. The defendant had disabled itself from exercising its functions and employing its franchise as it was intended it should by the act under which it was incorporated, and had, by the action which was taken, placed itself in complete subordination to another and different organization to be used for an unlawful purpose, detrimental and injurious to the public. This was a subversion of the object for which the company was created, and it authorized the Attorney-General to maintain and prosecute this action to vacate and annul its charter." The Standard Oil Trust was also declared illegal on similar grounds by the Supreme Court of Ohio in 1892.

The result of these suits showed that even without the new menace of the Federal antitrust law the legal position of the trust had become impossible. The states had prohibited all combinations in restraint of trade. The corporation is the creation of the state, and the state can revoke the powers which it has granted when these powers are exceeded or unlawfully exercised. Certain corporations had combined into trusts in order to limit competition—e. g., to restrain trade. These corporations had exceeded their powers, they had violated the laws of the states which had created them, and their charters were therefor forfeited. Unless some new device could be discovered by which the hardships of competition could be alleviated, the pool whose existence, though illegal, could be partially concealed, and which was ordinarily safe from legal attack, whenever regu-

lation was required, must still be employed. Its defects were generally admitted, and it often aggravated the very evils which it was designed to cure; but if the trust was to be forbidden, the pool seemed to be the only form of combination possible.

In 1892 the Standard Oil Trust solved the problem presented by the illegality of the trust agreements by the application of the principle of community of interest to the managment of its various constituent companies. This trust was dissolved, and the stock was returned to the holders of the trust certificates, which were then canceled. A majority of the stock of each company, however, was retained by nine men who had been prominent in the affairs of the trust, and unanimity of action was in this way secured. Such an arrangement is always open to objection. It depends for its success upon the maintenance of harmony among the members of a group of individuals, and upon the tensile strength of the ties of self-interest supplemented by the bonds of friendly association and personal regard. The control of the various Standard Oil companies was held by the members of a single family and their close personal associates. These men had long been identified with a single interest, and the feuds of the competitive struggle had not divided them. The principle of community of interest proved to be, in this case, a working substitute for permanent organization.

Generally speaking, however, mutual self-interest backed by the friendship of members of a group of business men is a precarious foundation for stability of prices or rates. Self-interest may lead men one day together and the next day it may lead them apart, and when the paths of self-interest diverge, friendship is usually powerless to prevent a break. Community of interest, as applied to railroads on May 9, 1901, did not solve the difficulty. Yet the threatened catastrophe of renewed competition among the members of the trust must be prevented, not only to secure the advance toward stability of prices, which had already been

made, but to furnish similar solutions for other vexing problems of competition.

Before 1889, when the corporation law of New Jersey was revised, the laws of no state authorized the chartering of a corporation for the general purpose of owning the stocks or property of other corporations. Consolidation of corporations was more generally permitted, but the purchase of stocks of other corporations by a holding company was not considered to fall within the field of corporate privilege. There were but few exceptions to the general rule that a corporation should be organized for a specific purpose or for closely allied purposes. Pennsylvania had gone so far as to prohibit incorporation for more than one purpose.

In 1889 New Jersey revised its corporation act to permit corporations organized thereunder to acquire securities issued by corporations of other states and also as New Jersey Corporations to transact business in other states. Under this law, following the decisions against the American Sugar Refining Company in New York in 1890 and the Standard Oil Company in Ohio in 1892, the trusts proceeded to reorganize as New Jersey Holding Companies. The same control over the policies and actions of the constituent companies which had, under the "Trust" form of organization been exercised by the trustees, was now transferred to the directors of the holding company. The changes in organization were as follows:

(1) To substitute for the certificates of the trust the shares of the new corporation, which were issued in exchange for the trust certificates.

(2) To substitute for a board of trustees elected by the holders of trust certificates, a board of directors elected by the stockholders of the New Jersey holding company.

The assets of this New Jersey corporation consisted of the stocks and bonds of other corporations, each of these subsidiary companies being in full possession of its corporate faculties and exercising all of its lawful activities.

The difference between the old-time trust and the trust as we know it to-day, and the nature of the change in combination-organization which has taken place, may be illustrated by the accompanying table, which shows the metamorphosis of the Sugar Trust in 1891.

STOCK OF CONSTITUENT COMPANIES IN HANDS OF TRUSTEES—TRUST CERTIFICATES OUTSTANDING

THE AMERICAN SUGAR REFINING CO.

	Capital Stock	Capital Assets	Capital Stock
1. The Havemeyer & Elder Sugar Refining Co.......	$500,000	$500,000	
2. The Dick & Meyer Co.....	200,000	200,000	
3. The DeCastro & Donner Sugar Refining Co.......	350,000	350,000	
4. The Moller & Sierck Co....	210,000	210,000	
5. The Oxnard Brothers Co...	100,000	100,000	
6. The F. O. Matthiessen & Wirchers Sugar Refining Co....................	400,000	400,000	
7. The Brooklyn Sugar Refining Co...............	300,000	300,000	
8. The Havemeyer Sugar Refining Co...............	1,000,000	1,000,000	
9. The Forest City Sugar Refining Co...............	300,000	300,000	
10. The Boston Sugar Refining Co....................	650,000	650,000	
11. The Standard Sugar Refining Co...............	1,000,000	1,000,000	
12. The Bay State Sugar Refining Co...............	225,000	225,000	
13. The St. Louis Sugar Refining Co...............	755,000	755,000	
14. The Louisiana Sugar Refining Co...............	450,000	450,000	
15. The Planters' Sugar Refining Co...............	250,000	250,000	
	$6,690,000	$6,690,000	
	Valuation	$50,000,000	$50,000,000

For all practical purposes the two organizations are identical. Under the "Trust" the control of each company was

vested in a board of trustees, who issued trust certificates against the shares which they held. Under the "Holding Company" the control of each company was located in the company which held its stock, not as trustee, but as owner. In place of a board of trustees came a board of directors; in place of a distribution of dividends collected by trustees to holders of trust certificates, a distribution of dividends received by the holding company as declared by the subsidiaries to the holders of its own stocks. The parallel is almost exact.

The desired result of restricting competition by a permanent organization appeared now to be accomplished. It is true, that the state authorities could, as Missouri did, expel domestic corporations on the ground that by allowing their stocks to pass into the possession of the Standard Oil Company of New Jersey they had disabled themselves from obeying the anti-combination laws of their state. Of such interference, however, the New Jersey holding companies were not afraid. The field was vast and the difficulty of arousing state authorities to action was great.

A more serious menace was the Federal Anti-Trust Law, passed in 1890, known as the Sherman Law. The important sections of this statute are as follows:

> Section 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal.
>
> Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.
>
> Section 2. Every person who shall monopolize, or attempt to monopolize or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be pun-

ished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

The law, however, was quickly declared inoperative against the New Jersey holding companies by a decision of the Supreme Court in the case of the United States vs. the E. C. Knight Company. The American Sugar Refining Company had purchased four refineries located in Philadelphia and suit was brought by the Department of Justice to enjoin one of the purchases on the ground that it was a violation of the Sherman Law. The court, though by a divided vote, held that the combination, assuming that its purchase resulted in forming a combination, related primarily to manufacturing, that any commerce resulting from manufacturing was merely incidental thereto, and that Congress had no authority under the Commerce Clause of the Constitution, over any transaction which did not primarily relate to interstate commerce.

Freed by this decision from apprehension as to the legality of their course, promoters and bankers in 1898, launched the trust movement which within five years brought under the control of New Jersey Holding Companies large sections of the principal manufacturing industries of the country. Coal, heavy iron and steel, lumber, railway equipment, liquor, worsted cloth, crackers and biscuits, smelting, harvesting machinery, corn products, rubber goods, explosives, ship building, tobacco, in addition to oil and sugar, to mention only the most important of the industries whose ownership was in large part consolidated under the New Jersey Corporation Act were all brought under the control of holding companies. In each case the method was the same, the exchange of stock or bonds of a holding company for the stocks of companies which it was desired to unite.

In 1901 the movement spread to the railroads. In order to compose the differences arising out of the contest for control of the Northern Pacific Railroad Company, the Northern Securities Company of New Jersey was formed to exchange

its stock for the stock of the Great Northern and the Northern Pacific, parallel and competing lines of railway extending from Lake Superior to Puget Sound. Rumors were also current of a Southern Securities Company and a Southwestern Securities Company, while in the eastern field the Pennsylvania Railroad Company had already acquired control of its principal competitors in the soft coal carrying trade and the Reading Company in this same year, 1901, had purchased a controlling interest in the Central Railroad of New Jersey. The industries of the United States seemed to be rapidly drifting toward complete consolidation when the Department of Justice again intervened.

Attorney General Knox, in February, 1902, filed a petition against the Northern Securities Company praying that it be enjoined from voting the stocks of the two railroad companies which it held, and also that it be enjoined from receiving dividends on these stocks. The claim of the government was (1) that a controlling stock interest in these two parallel and competing railways systems was held by the Northern Securities Company, (2) that it was manifestly to the interest of this majority stockholder that competition should be suppressed between these companies, and (3) that it should be presumed that this dominant voting power would be so exercised as to restrict and limit competition, and therefore, (4) that the stockholding body which had the power and the incentive to violate the law should be permanently enjoined from exercising those corporate functions of voting and receiving dividends through which the law might be violated, and the profits of violation might be obtained.

This argument which, in the writer's opinion, is the most forcible presentation of the cases against the holding company as successor to the trust, was answered by the attorneys for the Northern Securities Company, in substance as follows:

> "The Northern Securities Company is an investor in railway stocks. It was formed not to restrain trade, but to promote trade. It claims the right of any individual in-

> vestor of any financial institution, of any trustee, to exercise all the rights incidental to stock ownership. The Northern Securities Company exercises these rights by virtue of power conferred upon it by the State of New Jersey. Congress has no power under the Constitution to override the right of the States to charter corporations for lawful purposes, and the holding of securities is a lawful purpose."

In this case, it appears that the holding company as a device to override the laws against unlawful combination in restraint of trade, was on trial, and it is therefore surprising to find that the government won by a divided vote. The Supreme Court, by a bare majority, held that the Northern Securities Company, as then constituted, was a combination in restraint of trade, because its stockholdings in the Great Northern and Northern Pacific Railroad Companies gave it the power to restrain interstate commerce, and because it would be to its advantage to exercise such restraint by limiting the competition and increasing the profits of the companies which it controlled.

While this decision struck at the holding company as a device for defeating a federal statute under the protection of a State law, it did not finally settle the question of the legality of a combination of manufacturing companies, which had been definitely taken out of the scope of the federal power by the E. C. Knight decision in 1895.

The suits against the Standard Oil Company and the American Tobacco Company, however, struck directly at the industrial combinations. The Circuit Court, in deciding against the American Tobacco Company, brushed aside the technicality of the Knight decision, assumed that a corporation controlling other corporations engaged in trade throughout the United States, was engaged in interstate commerce, and declared that "the Sherman Act must be construed as prohibiting any contract or combination whose direct effect is to prevent the free play of competition and thus tend to deprive the country of the services of any number of independent dealers however small. . . . Two individuals who have

been driving rival express wagons between villages in two contiguous states who enter into a combination to join forces and operate a single line, restrain an existing combination, and it would seem to make very little difference whether they make such combination more effective by forming a partnership or not."

There is no reason to question the good faith of the circuit court judges in placing this strained interpretation upon the law. In fact, however, they were attempting to extinguish the face and vitality of the law by pushing its application to an absurdly impossible extreme. If the Supreme Court had accepted this interpretation, it might have been necessary for the President to summon Congress in an extra session to repeal the Sherman law. So serious would have been this shock to business confidence on learning that every agreement which restrained interstate trade was unlawful.

The Supreme Court, however, by a vote of eight to one, Associate Justice Harlan dissenting, in declaring the Standard Oil Company of New Jersey an unlawful combination, laid down the principle of interpretation of the Sherman law, that this statute does not prohibit every contract restraining trade, but merely those contracts and combinations which result in *undue* and harmful restraints of trade. Chief Justice White stated that Congress, in passing the law, made a comprehensive enumeration of *every contract, combination in the form of trust or otherwise, or conspiracy,* in order to make sure that no form of combination by which an *undue* restraint of interstate or foreign commerce might be brought about, would escape the prohibitions of the Act.

In order to decide what are *undue* restraints of trade, the Court refers to the *standard of reason which had been applied* at the common law, and applies this *rule of reason* to determine whether a given combination is a violator of the Sherman law. The Court further declared that the meaning of the Sherman Act is clarified by the second section which declares "the attempt to monopolize" as a crime pun-

ishable by fine and imprisonment. In both the Oil and Tobacco cases the Court discovered abundant evidence that these companies had been organized "with an intent to monopolize" and that they were, therefore, unlawful and must be dissolved.

The now famous "Rule of Reason" therefore removes the holding company, as such, from the prohibitions of the Sherman Act. If such companies attempt to establish monopolies, they may be dissolved, but the fact that they represent a combination of previously competing companies will not condemn them without proof of specific wrongdoing.

Since the Oil and Tobacco decisions a number of anti-trust suits have been decided, some criminal against individuals and others based on petitions for the dissolution of holding companies. Criminal juries are not inclined to convict for the crime of combination which, in the view of most men, is no crime at all. The government has, however, won a few cases where secret pooling agreements have been brought to light.

In civil proceedings better success has been met with. The Powder combination has been dissolved, a portion of the assets of the parent company being divided between two other companies in no way connected with the parent company. The International Harvester Company has transferred its foreign business to a separate corporation, although the suit against it is still pending. On the other hand, the government has been defeated in the lower court in its attempt to dissolve the United Shoe Machinery Company, and also in its attack upon the United States Steel Corporation. The decision in the Steel Corporation case was, however, noteworthy in that, while allowing the corporation to continue, it declared that the practice of reaching informal agreements and understandings with its competitors by which prices were made uniform in certain lines. The Court in other words pointed out certain errors of the corporation, without enforcing the extreme penalty. In each case the Court held that

neither the existence of a monopoly or of an attempt to monopolize had been proven.

A recent addition to the machinery of enforcing the anti-trust law and a strengthening of the law itself, was the passage in 1914 of two statutes, the first known as the Federal Trade Commission Law, which created a board of service members known as the Federal Trade Commission, and the second as the Clayton Law.

The Federal Trade Commission is in many respects similar to the Inter State Commerce Commission and is given like powers. Its duties are first, to investigate corporations engaged in interstate and foreign commerce, with the exception of banks and common carriers, to detect any violations of the statutes relating to commercial methods and practices, and its second function is to determine, after hearing on complaint filed by the commission, whether particular persons, partnerships, or corporations have violated any of the provisions of the laws relating to the matter placed under its care. The commission is also charged with the duty of issuing orders where violations of the law are discovered, and it can appeal to the courts to enforce these orders. All of the proceedings of the commission are subject to review by the courts, but its business is given precedence over other cases, and is to be in every way expedited. The Trade Commission Law also established a new standard by which the legality of certain business practices can be determined, by declaring that unfair methods of competition in commerce are hereby declared unlawful. It will be for the courts to finally determine what these unfair methods are.

The Clayton Law goes much further than the Trade Commission Law in enumerating certain business practices which are declared to be unlawful. These unlawful practices are as follows:

1. Price discrimination when the object is to create a monopoly.

2. Tying contracts, by which the sellers or lessors of

goods attempt to prevent buyers or lessees from buying or leasing the goods of others, the object being to create a monopoly.

3. Prohibition against the ownership of stocks in competing corporations by a third corporation unless the purpose is for investment.

4. Prohibition on inter-locking directorates by which is meant the holding of directors' positions in two or more large banking institutions in large cities, or large corporations of any kind.

Assuming that business is in need of such drastic regulation, the Federal Trade Commission is probably an improvement over the working of the Department of Justice in enforcing the Anti-Trust Law. All of the orders of the Commission must come before the courts. The authority of the Commission, and the respect in which it is held, will depend upon the final disposition of its orders.

Holding companies are not formed solely for legal reasons. Important considerations of financial expediency favor the use of this device when it is desired to bring under single control within a short time a number of properties in the same line of business. When it is desired to form a combination, for example, of a number of steel manufacturing concerns, one of the operating companies can be used as a holding company, or a new company can be formed. Even if no legal obstacles intervened, however, the holding company will be the device usually selected.

Mr. Robert F. Herrick, in a paper entitled "Holding Companies," has summarized the situation as follows:

"The natural purpose, then, of a holding company and the one for which it is used is the combination of allied and generally though not necessarily competing enterprises. Theoretically, such a combination or purchase could be effected by any one person or group of persons with sufficient capital. Further, it could be effected by the purchase outright, either by private individuals or a corporation, of the various properties or business. Practically, however, a great

many combinations would never be brought about except for the holding company, and practically all of the great recent consolidations, such as the United States Steel Company, the Amalgamated Copper Company, and others, have been holding companies. It would have been practically impossible for the United States Steel Corporation to have been formed in any other way. It is necessary in the getting together of such a group of properties to act quickly and at a favorable time. It is necessary, so far as possible, to get along without new cash. The amount of cash necessary to buy the properties consolidated into the United States Steel Corporation would have been impracticable to raise. It is necessary, further, as much as possible to retain the interest of a large number of stockholders in the older companies in the new consolidated company. It is necessary to provide a practical working method of bringing them all together, and particularly necessary to provide for the contingency that it may be impossible or impracticable to actually sell the property of one of these corporations to the consolidated company, or that it may be impossible to get the consent of certain of those interested in the selling company to the consolidation.

"The stockholders act naturally like a flock of sheep. In the main they follow the lead of the directors, and if the details of carrying the plan through are so arranged that the stock in the new company has an apparent money value greater than the stock of the old company for which it is offered, the exchange once started takes place generally, and when a majority of the stock in the companies is exchanged practically the consolidation is effected. The difficulty in bringing enterprises together in any other way can be realized when you appreciate that in many states it is impossible for a corporation, even a private manufacturing corporation, to sell out its entire property, including franchises and good-will. It has been held in some jurisdictions that such a sale is foreign to the whole purpose for which the corporation was formed and that when the time for such a sale comes,

it means the dissolution of the corporation and a final disposition of its assets among its stockholders. There is further in certain states the absolute prohibition for a corporation of greater than a limited amount of capital to do business in the state. This alone would prevent the amalgamation of a number of properties into one great corporation directly owning all the properties."

Another reason for choosing the holding company for the consolidation is that to employ an operating company as the purchaser of the stocks of other corporations, would require a large increase in the stock of this company, and this increase might, under the laws of the state or the charter of the corporation, require the consent of three fourths or even a larger proportion of the stock. Stockholders of the proposed holding company might object to this reorganization of the capital account for a purpose of which they might not approve, and the combination might be halted at its outset by embarrassing litigation resulting from the efforts of minority stockholders to protect what they considered to be their rights whatever the motives back of the litigation.

A holding company has various other uses in addition to that of accomplishing a combination. It is largely employed as a finance company. One of the best illustrations of holding companies organized for this purpose is furnished by the corporations manufacturing electrical apparatus and appliances. The products of the General Electric Company, for example, are purchased by corporations engaged in the operation of electric railroads, power and lighting companies. When these companies are started, their promoters usually welcome assistance in providing the funds for construction. They are willing not merely to make liberal arrangements in the way of stock bonuses, but also to give to the construction companies affiliated with the banking or financial concerns which give them assistance in putting through their project, exclusive contracts, not merely for construction, but also for all materials and appliances which may be needed

for a long time to come in the maintenance and extension of the plant.

The companies manufacturing electrical appliances have, therefore, placed themselves in a position to render financial assistance to new companies in order to secure a market for their machinery. The General Electric Company owns the entire capital stocks of the Electrical Securities Corporation and the Electric Bond & Share Company. Both of these companies are finance companies; they take part in the underwriting of securities of electric companies of various kinds, and also purchase the bonds of such companies, sometimes taking with the bonds a bonus of stock. They obtain the funds for these purchases, not merely because of the high credit which the backing of the General Electric Company gives them, but also by selling their own bonds secured by the stocks and bonds which they purchase. The Electrical Securities Corporation, for example, in 1904 offered $500,000 out of $1,000,000 collateral trust five per cent bonds secured by $1,250,000 par value of first mortgage bonds of nine electric railway, power and traction companies located in different parts of the United States. These companies earned a surplus over fixed charges, and the Electrical Securities Corporation was required to keep the principal acquired out of its interest-paying bonds under pledge equal at all times to at least 125 per cent of the principal of the collateral trust bonds outstanding. When a favorable opportunity occurs, bonds may be withdrawn and sold, a corresponding amount of the collateral trust bonds being paid off. In other cases, the substitution of collateral, according to the method already explained in the discussion of the collateral trust bonds, is permitted.

By pledging the bonds which it purchases as collateral for loans, a corporation of this character is able to free its capital for new employment without selling unseasoned bonds at the low prices which such securities bring. The bonds can be put away under the collateral trust mortgage until the companies issuing them have reached an assured position, when

they can be sold at a substantial advance over the price paid. Bonds purchased by such corporations, moreover, often carry a bonus of stock, and the stock can either be held for dividends or sold as soon as it reaches a proper figure.

A limit is usually placed upon the amount of collateral trust bonds which such a corporation can issue. In the case of the Electrical Securities Company, for example, the "total indebtedness of the corporation, secured and unsecured, direct and contingent, shall never in the aggregate exceed four times the amount of its paid-up and unimpaired outstanding capital stock and surplus." Bonds of such a corporation, issued under these restrictions, furnish very good security. The fact that the collateral pledged represents the bonds of a number of different enterprises adds to the safety of these obligations.

The object of the Electrical Securities Corporation and the Bond and Share Company is to assist the owner of their stock, the General Electric Company, in pushing its business. It is not their object to retain permanently the bonds which they purchase. As fast as these show a substantial profit, they are sold and the proceeds reinvested in other securities. Other companies have been organized on this model for the purpose of permanent income to be derived from the securities yielding the high rate of return purchased with their own bonds at a lower rate. The Mortgage Bond Company of New York, for example, owns first mortgages in a large number of cities, and from time to time issues bonds secured by these mortgages with the proceeds of which other mortgages are purchased. The bonds of this company must at all times be secured by deposit with the trustee of first mortgages equal in face value to the value of the bonds outstanding on improved real estate in cities having a population not less than 40,000, subject to the right of the company temporarily to deposit cash, Government bonds, or New York City bonds at a valuation of five per cent below the market value thereof. All the mortgages used as collateral are limited to one half of the value of the mortgaged property as

appraised for the company. With cities having a population of 300,000 or over, such mortgages may equal three fifths of the value of the property, and in New York City, two thirds of the value. These bonds are issued at low rates of interest, and their proceeds can be loaned at rates which show a substantial margin of profit for the stock. The mortgage bond indebtedness of the company is limited to fifteen times the capital stock outstanding at the time of issue. Other illustrations of holding companies organized for permanent control of properties are the American Water Works Company, the American Pipe Manufacturing Company, the American Gas Company, the American Light & Traction Company, and the United Gas Improvement Company.

The finance holding companies which have been described are similar to the organization of the investment trusts which are numerous in Great Britain. These corporations are organized to make available to the general investor the stocks and bonds of other companies, thereby relieving him of the task of finding safe investments for his money. Investment Trusts issue shares or debentures bonds to the investor, and with the funds obtained, they purchase large blocks of securities in various companies, many of them located outside of England. It is not regarded essential that these interests should be controlling interests. In some cases, new flotations can get their capital from such investment trusts. The purpose of these investment holding companies is indicated in the prospectus of the General Investors & Trustees, Limited, which says:

> This company has been formed to conduct the business of a trust and investment company. . . . The directors believe that the present is a favorable time for engaging in such an enterprise, securities being generally free from inflation, and the conditions of trade throughout the world being of a satisfactory character. It has been shown by experience that a well-managed investment company enjoys many advantages which are not usually within the reach of a private individual, who cannot generally exercise that

> vigilance essential to successful results. The former is in a position, while as a rule a private investor is not, to make the investigations necessary to ascertain the real position and intrinsic value and prospects of the undertakings in which it contemplates investing its capital. The information now required to be given by companies under recent legislation in conjunction with their annual reports and accounts, provides a useful index to their merit, and furnishes an invaluable aid to the operations of a trust and investment company. The business of participating in the underwriting of new issues of Home, Foreign, and Colonial Loans, and of bonds, debentures and debenture stocks, and shares and stocks of approved companies, will form a prominent feature of the company's operations.

The advantages of such a company are many. In the first place, it can act as an underwriter in taking over the stocks and bonds of new corporations in which it has confidence at very low prices, receiving occasional bonuses of stock, and selling its own shares or debenture bonds on an investment basis. This is essentially the same plan as that followed by railroad companies which build branch lines through subsidiary companies, and then sell securities of these companies in the form of their own collateral trust bonds to the public. The Investment Trust Company has also an advantage over the investment banker in that the latter is compelled to turn over its capital quickly, and is forced, in order to market securities purchased, to give the purchaser lower prices than those which could be obtained for these securities if they were held until the company had fully demonstrated its earning power. The English investment trust, moreover, may retain its purchases, or may sell these securities when they appreciate in value as result of increased earnings. In either case, its shareholders obtain the full benefit of appreciating value which the American banker is forced to divide with his customers. The second point in favor of the investment holding company is that it spreads its

investments over a wide field, by which it can, in the same manner as life insurance companies, reduce the risk of loss to a minimum. The investor in its debentures or shares can also be safeguarded by reserve funds built up out of the dividends and interest which it receives.

CHAPTER XXX

THE LEASE

THE lease has already been defined as a contract by which possession of certain property is transferred from the owner known as the lessor to some other person or corporation known as the lessee. Corporate leases contain the following provisions:

First, a description of the property, usually in the form of a complete inventory, which must be kept up to date, since the nature of corporate property is likely to be constantly changing. For example, the property of a street railway company, where the motive power is in turn changed from horse power to cable, then to the overhead trolley, and finally to the underground trolley, may be entirely different at the end of a ten-year period from what it was at the beginning. If this property is to be leased to another company, it is important that the inventory be revised at regular intervals.

Second, the length of the lease. It is usual to make corporate leases for long terms, ninety-nine years being common, and 999 years not unusual. When leases are made for shorter periods, options of renewal on certain terms are usually inserted.

Third, payments under the lease. With hardly an exception, corporate leases provide that taxes, insurance, interest, and expenses of maintaining the organization of the lessor shall be paid by the lessee. In addition, the payment for the lease to the lessor is usually made in the form of a dividend upon the capital stock of the lessor as then outstanding. It may also be provided that the lessee shall pay as rental

for the property a certain proportionate part of the gross earnings or of the net earnings. This method places no limit to the participation of the owner in the profits of the property. These payments are frequently made on a sliding scale so as to permit the stockholders to share in the expected increase in profits.

Corporate leases provide, in even greater detail than private leases, for the maintenance of the property. This point needs to be far more carefully guarded in short term leases than when, for example, ninety-nine year leases are made. If the maintenance of leased property is not carefully looked after, as the date when the lease expires approaches, the lessee, unless he expects to renew the lease, will allow the condition of the property to deteriorate, making as much money as possible during the last year or two of his occupancy. In order to protect the lessor against such an abuse of his rights by the lessee, there may be reserved to the lessor the privilege of examining its physical condition. A typical provision for maintenance is the following, taken from the lease of the property of the Manhattan Railway Company to the Interborough Rapid Transit Company:

> The lessee covenants and agrees, at its own proper cost and expense, to maintain, operate and run the demised railroads and property during the said term in the same manner as the lessor is now or shall at any time hereafter be required or authorized by law to do; and shall and will keep all insurable property insured in reasonable amounts and rebuild all buildings and replace all property destroyed or deteriorated by fire or otherwise, to such an extent as to be unfit for use; and shall and will maintain, preserve and keep the railways and property hereby demised, including all property hereafter acquired, and every part thereof, in thorough repair, working order and safe and efficient condition, and supplied with rolling stock and equipment, so that the business of the said demised railways shall be preserved, encouraged and developed, the business thereof be done with safety and expedition, the public be accommodated in respect

thereto, with all practicable convenience and facilities, and the future growth of such business as the same may arise or be reasonably anticipated be fully provided for and secured.

The lessee further covenants and agrees, at the expiration or termination of this lease for any cause, to return and deliver the said railroad and railroads, real estate, and properties by this lease demised, including, among other things, all property, additions, improvements and equipments which shall be furnished, constructed or completed out of the proceeds of sale of the stock, bonds or property of the lessor, to the lessor in as good order, condition and repair as they were at the date this lease takes effect, or at the date when the same came into the possession of the lessee, and to surrender said franchises, rights and privileges, easements and properties unimpaired by any act of the lessee; excepting, however, all property of the lessor sold pursuant to the terms hereof, the proceeds of which shall have been applied as herein provided.

The lessee further covenants and agrees that it will, at all times during the continuance of this lease, at its own expense, keep the said rolling stock, and tools, equipment, machinery and implements necessary for the operation of the road, in good order, condition and repair, and will, as the same shall be worn out and rendered unserviceable, replace the same at its own expense, so that the said railroad and railroads shall always be kept, maintained and equipped in good and safe condition and effective working order.

The lessee further covenants and agrees that it will at all times during the continuance of this lease, at its own expense, comply with all lawful requirements with respect to the construction, maintenance and operation of said railroads, extensions or branches thereof.

In corporate leases, when the instrument covers, for example, a large and complex street railway system, it frequently happens that some portion of the property of the lessor is no longer of use to the lessee. It is for the interest

of both parties that this property should be sold. Provision is usually made, therefore, for the sale of such property, with or without the consent of the lessor, but invariably with the stipulation that the proceeds of the sale are to be invested in improvements upon the lessor's property. In other respects the language and form of a corporate lease closely follows the corporate mortgage, the main objects being to preserve the physical condition of the property and to protect the lessor against any claims or charges arising from the non-fulfillment of any obligation connected with the property released. If the property is mortgaged, such a stipulation is, of course, necessary, and the consent of the trustee of the mortgage must be obtained.

A proposition made by a strong company to stockholders of another corporation to lease their property at a rental corresponding to the dividends which they are then receiving or of which there is an immediate prospect, is very attractive, and it is not so essential to make sure of their acceptance by purchasing enough stock to control the board of directors of the lessor company, as when a proposition is made to purchase the stock. A typical proposition of this character is indicated in the following offer:

> The Indianapolis Terminal and Traction Company offers to lease the property of the Indianapolis Street Railway Company, guaranteeing the payment of interest, taxes, etc., and also dividends on the street railway stock of one per cent on January 1; next, and thereafter semiannually 3 per cent for the first year, 4 per cent for the second year, 5 per cent for the third year, and from July, 1908, 6 per cent. The term of the lease is for thirty years, which is the unexpired life of the Indianapolis Company's franchise from the city.

The advantages of the lease, from the standpoint of the lessee, are equally evident. The lessee company obtains the control of property without the outlay of any money, and usually on terms which leave them a margin of profit after making the payments required by the lease. If property is

to be built a large amount of financing is necessary. Bonds or stock must be sold, and extensive construction operations entered into. If, however, the property desired can be rented from its owners, the lessee company comes immediately into the possession of a fully completed property, manned by an operating organization and on a profitable basis. The same result, from the standpoint of control, may be reached by purchases of the stock of the company owning the desired property, which can be pledged under an issue of collateral trust bonds. This method has already been explained. Here, however, the question of financing arises, the bonds must be sold, or a sufficient sale must be insured by a syndicate to purchase the amount of stock desired. The question of stock, moreover, as we have seen, usually involves the entire issue of the company which owns the desired property, and the financing may be extensive. To acquire control by the method of lease, however, involves no more than dealing with the board of directors, and the submission by them of a proposition to the stockholders. If the offer is advantageous, and with the prestige of the directors behind it, it is likely to be unanimously accepted.

Leased property has objections from the point of view of the lessor. It is not available as security for loans to pay for improvements which may increase its value. While the property of a street railway system is in the possession of the lessee company, and while its operation is entirely controlled by the lessee, title to the property remains in the lessor. In the natural course of improvement, with a steady growth of population, large extensions and additions, and a considerable amount of reconstruction of the property, are reasonably certain. The progress of invention has completely revolutionized the methods and mechanism of street railway corporations. The motive power, types of cars, the methods of generating power and the types of track, have been greatly improved. The cost of all these improvements and extensions which are made upon the property of the lessor, in the absence of special provisions in the lease, must be borne by

the lessee company. With a short term lease, the improvement of the lessor's property may be the ground for a successful demand for higher rental from the lessee, and improvements are likely to be deferred or abandoned on this account. With a long term lease, the only objection to improving the lessor's property is the difficulty of financing the cost of these improvements. In such cases, the only property right held by the lessee is the lessor's interest obtained by capitalizing the profits of the lease. This right may in some cases be very valuable. We have already seen that it was one of the assets pledged by the Interurban Rapid Transit Company as security for a recent issue of bonds. In few cases, however, are the profits so large as to make the lessor's interest of great value, and great difficulty may be experienced in financing improvements which are absolutely essential to the development of the system, and which may, in fact, be demanded by the public authorities.

A recent illustration of the difficulty experienced by the lessee company under these circumstances is furnished by the Philadelphia Rapid Transit Company which holds under lease the street railway property of the Union Traction Company which preceded it in control of the street railway system of Philadelphia. In September, 1908, the Rapid Transit Company sent a letter to the shareholders of the Union Traction Company which is as follows:

"On July 1, 1902, you turned over to this company your property on a rental basis. You had acquired this property seven years before, had expended your money in the development of it, and while in later years you had shown a surplus from operation, that surplus had not, up to that time, been sufficient to justify the payment of a dividend.

"This company, by the terms of the lease, undertook to pay you a dividend from the start, equal to the largest earnings which you had shown up to that time, and increasing until they should reach, as they now have, double

that amount. In the past six years we have spent approximately \$20,000,000 in building the new elevated and subway railway and \$20,000,000 upon improvements and extensions of the system which you turned over to us. This company has been subject to severe criticism for having assumed to pay a dividend upon the par value of your stock, only thirty-five per cent of which has been paid in, but the answer is that we have (in effect) spent upon this system not only the $19\frac{1}{2}$ millions remaining unpaid upon your capital stock but $10\frac{1}{2}$ millions additional, with respect to which \$30,000,000 no fixed charge has been assumed and no return has been paid.

"The increased cost of operation, the recent depression in business and unavoidable delays in the completion of the subway have necessarily upset, to a certain extent, the calculations upon which the rental obligations were based. These conditions, however, have merely postponed the fulfillment of our expectations, and the management has full confidence in its ability to place the property upon a substantial paying basis, provided it is able to do the financing always necessary for a growing property.

"Since we took over this property we have secured a contract with the city in which the Rapid Transit Company has given up valuable privileges for the purpose of securing to your company immunity from the threat of hostile legislation. This contract is of the very greatest benefit to the Union Traction Company and its underlying lines.

"As already stated, nearly half of the \$40,000,000 capital raised by this company has been expended directly upon the surface system. Several millions of dollars went to the building of what are practically new lines, although they have been built under extensions of your old charters, principally the Twenty-second Street and Allegheny Avenue Passenger Railway Company in which you own every share of stock, and the West Philadelphia Passenger Railway Company (under which new lines have been built on 52d, 58th, and 60th streets) in which your company owns a controlling interest.

"The Rapid Transit Company has now made the final call upon its capital stock and this has been practically exhausted by the expenditures already detailed. It is now necessary to relay many miles of surface track and to add equipment of a more modern character calculated to serve the public better, and to collect a much greater percentage of the fares. These expenditures will be made directly upon your property, rendering the security of your lease that much better, both as to the value of the property and its earning power."

It appears from this letter that, unless the Rapid Transit Company could make use of the credit of the Union Traction Company, the financing of necessary improvements would be impossible. A proposition was, therefore, made to the stockholders of the Union Traction Company to permit the former to use a large number of valuable securities enumerated in the list and intrusted to the Rapid Transit Company as collateral security for an issue of $5,000,000 of collateral trust bonds. The proposition was accepted by the Union Traction Company, and the funds provided. Evidently, however, the lessee company cannot always count upon the acquiescence of stockholders of lessor companies in placing encumbrances upon their property for the benefit of that property. In recent leases, provisions have been inserted whereby the lessor company is obliged, under certain conditions, to finance improvements upon its own property.

One of the most carefully drawn leases ever executed is that which gave to the Boston Elevated Railway Company the control of the West End Street Railway. The lease bound the Boston Elevated to pay seven per cent per annum on the common and eight per cent on the preferred stock directly to the stockholders without any reduction, the lease stating that these dividends were to be "net" amounts. The lease further explicitly provided that the Elevated Company should pay all damages to persons or property; all sums due

for taxes — federal, state or municipal — upon the lessor's property, franchise or capital stock; and all sums "by law required to be deducted from any amounts payable upon the lessor's stock." The lease, on the other hand, stipulated that all saving from refunding of the West End Company's bonus should accrue to the lessee, the Boston Elevated Company. The lessee also assumed definitely the interest on the bonds of the West End Company, and on the existing indebtedness of any street railway, which the West End Company was under obligations to pay. It also assumed all liabilities under the contract with the city of Boston touching the subway.

The provisions in this lease regarding the right of the lessee to issue stock or bonds of the West End Company for improvements, particularly deserve attention. The West End Company was required to issue stock or bonds, from time to time, at the request of the lessee, in order to meet the cost of improvements and additions to the lessor's property. The West End Company must be informed of the purposes for which it is proposed to issue the securities, and if it dissent from the expediency of the expenditure, and withholds its consent to the issue, a board of arbitrators must pass upon the matter. If the arbitrators, by a majority opinion, do not approve the same, the lessee cannot insist upon the issue being made. One arbitrator is to be chosen by each of the parties to the lease, and the third by the two so chosen, or by the State Board of Railroad Commissioners, or by the Chief Justice of the Supreme Court of Massachusetts. The lessee company has the right to decide whether the issue of security by the lessor shall be stock or bonds, and it may fix the rate of interest which the bonds shall bear, but it is provided that "no bond shall be issued in excess of the outstanding capital stock" of the lessor. This reservation in the lease is of great importance to both the lessor and lessee. It enables the lessee to use almost at will the credit of the lessor for the purpose of improving property out of which it may be making a large profit.

It is true that the lessor is protected by the Arbitration Board, but still further safeguards are demanded. There is set down in detail in the lease the expenditures which the lessee can capitalize for the account of the West End Street Railway. These are especially limited to the following permanent additions and improvements:

1. The abolition of grade crossing.
2. Additional rolling stock and equipment.
3. Additional track mileage and its equipment.
4. Additional real estate.
5. Additional stations, power and car houses.
6. Additional buildings, bridges and other structures.
7. Renewals of or substitutes for stations, bridges, buildings and other structures, track and equipment, "so far as the cost of such renewals and substitutions exceeds the cost, when new, of the things received or the things replaced."

The provision just described is now often included in leases of properties where it is necesary to provide for capital expenditures. Another method sometimes employed, and which a proper organization of the capital account makes possible, is for the lessee, when it takes over the property of the lessor, and assumes the obligation to pay interest on its bonds, to take over also any unissued bonds authorized under existing mortgages, and to issue these at will subject to the restrictions of the mortgage. This method is preferable to that employed in the Boston lease which is apt to lead to endless discussions and bickering over the propriety of particular expenditures. If the restrictions in the mortgage are carefully drawn, the lessee can, without danger to the lessor's property, and in fact with great benefit to the lessor, freely employ the credit arranged for in the mortgage for the benefit of the lessor's property. In this manner provision can be made for the expansion of the business carried on with the leased property.

CHAPTER XXXI

READJUSTMENT OF THE CAPITAL ACCOUNT

THE capital account of a corporation has been described as a statement of assets and liabilities. From time to time, it becomes necessary or advantageous for a company to readjust its capital account, changing the form of assets, exchanging assets for liabilities, distributing assets or evidences of liabilities to stockholders, or changing the form of liabilities. The methods employed in making these readjustments can be grouped under the general title of readjustment of the capital account.

Reorganization of the capital account is usually required in the event of bankruptcy, if the business is to be continued. This form of reorganization will be considered in a later chapter. We are here concerned with the reorganization of the capital accounts of solvent companies.

Reorganization may relate either to assets or liabilities. The first condition under which reorganization may be necessary is when it is desired to change the form of assets. The property of a corporation is constantly changing. A railroad company, for example, may wish to sell a part of its equipment which is no longer suited to its purposes, or certain real estate put out of use by the rearrangement of a terminal. Similar occasions are constantly arising when it is desirable for a corporation to dispose of certain of its property. When securities are owned, and when the control over the companies which have issued these securities is no longer important to the corporation which owns them, opportunity sometimes arises to sell these securities, and to reinvest the proceeds, either in improvements or in other

securities showing higher rates of return. The testimony of Mr. E. H. Harriman before the Interstate Commerce Commission in its investigation of the alleged illegal combination between the Pacific companies in 1907, explained a transaction of this character as follows:

"We had, as the result of the Northern Pacific purchase, \$82,000,000 of Northern Securities stock, at a cost of about \$79,000,000. Then we were forced by the decision of the Supreme Court to take Great Northern, which we did not want, and a lesser amount of Northern Pacific than we had deposited with the Northern Securities Company. At the time the Great Northern and Northern Pacific was forced upon us, it had a market value of about \$100,000,000. . . . Instead of disposing of it at that time, we held it until the market price increased in value to somewhere near \$145,000,000 to \$150,000,000. We sold some of it gradually as it went up, but at that value the returns from the Northern Pacific and Great Northern were less than three per cent on the stock that we held. Therefore we concluded that it was better to sell those stocks and invest the same money in other securities that would give us greater returns. So that, following out that line, we have sold enough of those stocks to realize \$116,000,000."

Mr. Harriman further stated that the income from the securities purchased was approximately \$5,500,000, instead of \$3,250,000 on the Great Northern and Northern Pacific stock.

The working capital of a company, its cash, materials, and bills receivable, varies with the volume of its business. It is offset, in part, by current liabilities. With a falling off in business, a part of this working capital becomes unnecessary. It may then be employed to pay off the current debts of the company.

In some cases corporations may be unable to meet short term indebtedness at maturity, and may be obliged to sacri-

fice some of their property to take up their loans. The Colorado Fuel and Iron Company, in 1903, "found it necessary, in order to meet its obligations under contracts previously made, and for the extensive work of construction and betterments upon which the company entered a year or two ago, and also for its general corporate purposes, to raise money from persons interested either as stockholders or directors, or both, by means of loans and sales (the sales, however, being subject to a contract permitting repurchase by the Fuel Company within a specified time)." This property was afterwards repurchased by the corporation at an advance in price, the stockholders being allowed to participate in the profits of the repurchase.

The disposition of assets by the various methods above indicated presents no difficulty if the assets are not pledged as security for some loan. In case they are pledged, however, it becomes necessary to obtain the consent of the trustee, whose duty it is to make sure that the proceeds of the sale are used, either to reduce the amount of bonds secured by the mortgage under which the property sold was pledged, or reinvested for the protection of the bonds.

Taking up next the readjustment of liabilities, we come first upon the capital stock. The increase of capital stock as a means of distributing the surplus has already been referred to in Chapter XVIII. We are concerned with the conditions under which the amount of capital stock may be reduced. When the company has outstanding an amount of stock so great as to make it improbable that its earnings will ever reach a point where dividends can be safely paid, and especially when there has been such an accumulation of unpaid dividends on preferred stock as to make payment of dividends on common stock highly impracticable, the question arises, Shall the capital stock be reduced to a dividend paying basis? When the value of the stock, because of the remoteness of dividend payment, has fallen to a nominal figure, this question should be answered in the affirmative.

A company, for example, with $500,000 of surplus earn-

ings applicable to dividends cannot, as a rule, safely pay out more than $300,000. If $250,000 of this $300,000 is required to pay preferred dividends, and if the amount of common stock is $10,000,000, the $50,000 remaining equals only one half of one per cent on the total common stock. There may also be accumulated dividends on the preferred stock, making the payment of dividends on the common stock even more improbable. Common stock, under these circumstances, will usually sell for a nominal figure, under $5 a share. Very little of it can be sold at any price. If, however, the $10,000,000 of common stock could be reduced to $1,000,000, and the accumulated dividends on the preferred stock adjusted, the company would have enough surplus earnings to pay five per cent on its common stock, which might be expected to sell at from $50 to $60 a share. The proposition made to the common stockholders to exchange, say, ten shares of the old stock for one share of the new stock should be aceptable, since they obtain an income at once, and also a free market for their securities. In case the increased earnings of the company eventually make it possible to pay a high dividend on this reduced capital stock, the stock retired may be returned to the stockholders in the form of stock dividends, maintaining a dividend rate at a reasonable figure, and placing them again in their original position so far as concerns the par value of their holdings. This method was employed by the General Electric Company, which in 1898 reduced its stock 40 per cent in 1902 returning the amount to its stockholders in a special dividend. Several corporations which were grossly overcapitalized at the outset have reduced their capital stocks to a dividend paying basis. The American Malting Company and the Distillers' Securities Company, among others, have made such reduction.

Reduction of capital stock to place it upon a dividend paying basis can only be accomplished, unless the company is to be dissolved and its property taken over by a new corporation, by unanimous consent of the stockholders. This unanimous consent is comparatively easy to obtain when the

stock has only a nominal value, and where the directors are able to point out an immediate gain to the stockholder in taking the new securities. When, however, the stock, even though nondividend paying, has a speculative value and a free market, due to the prevalence of rumors concerning its prospects and earnings, or to reports that a contest for its control will be waged, or that it is to be consolidated with another corporation, it is then practically impossible to obtain the consent of the stockholders to reduce the value of their holdings sufficiently to enable the immediate payment of dividends.

Take, for example, the Erie. This company has outstanding $112,378,900 of common stock. The present company is now over fifteen years old, and the common stock has received no dividends. During the last fiscal year, the surplus over fixed charges was barely sufficient to pay four per cent on the $63,892,400 of preferred stock, which, however, received nothing. The preceding year showed a deficit of $2,199,226. In order to place the Erie upon a dividend-paying basis, even making allowance for the expected improvement in its earnings due to the reconstruction of its property which has been in progress for some years, it would require a reduction of the common stock to about one fifth of its present amount, to enable the payment of a moderate dividend within the near future. And yet the market price of the Erie is to-day (Aug. 29, 1910) $25¾ a share, and even in 1908, when its fortunes were at the lowest ebb, and when a receivership was anticipated, the lowest figure reached by the common stock was $12 a share. To reduce the common stock of the Erie from $112,000,000 to $30,000,000, placing it upon a four per cent basis, might result in a market price of $75 a share. A proposition to reduce this stock to a dividend paying basis would, therefore, be equivalent to asking the stockholders of the Erie to surrender about $20 worth of market value with a fair prospect of higher prices in the future, in return for four per cent stock which might be sold for $75 a share. If the Erie stock were held by investors, this

proposition might be acceptable, but since such stocks are held either for control or for speculation, it would be impossible to secure unanimous consent to a proposition to reduce this amount.

Illustrations of this situation are furnished by the Missouri, Kansas & Texas which earned last year $420,000 on $63,300,000 of common stock, but which sells at $42.50 a share on the prospects of consolidation with some other road, and the Southern Railway which showed a surplus of $3,511,100 on $120,000,000 of common stock which sells, however, at $27 a share. A reduction of the capital stock of small corporations whose securities have no speculative value to a dividend basis is feasible and desirable since it stops the accumulation of interest on the cost of the original stock to its holders. With large public corporations, however, whose stock contains an element of speculative value, this method is not often available.

An easier method of favoring the common stock in a reorganization is to fund accumulative dividends on preferred stock. Suppose a case like the following: A company issues $5,000,000 of preferred stock and $2,500,000 of common stock. The preferred stock carries seven per cent of cumulative dividends, and thirty-five per cent of unpaid dividends stand against the common stock. The company earns $500,000 a year net over charges, sufficient to pay the current dividends on the preferred, and leave $150,000 to be applied to the accumulated dividends. At this rate it will require eleven years to pay the accumulated dividends, during which time the common stock will receive nothing. A proposition is made to the preferred and common stockholders that the company shall issue five per cent debenture bonds or five per cent second preferred stock in exchange for these back dividends which amount, as already stated, to about $1,750,000 on $5,000,000. The debentures should sell, on the company's showing of surplus earnings, at about 80. The fixed charges of the corporation would be increased by the issue $87,500 per year.

This proposition would appeal to the two classes of stockholders as follows: The preferred stockholder receives, instead of a contingent right to $1,750,000 of dividends, that amount par value of debenture bonds with a market value of $1,400,000. There is little doubt that the preferred stockholder would accept a proposition so favorable. The common stockholder is equally advantaged by such a plan. The earnings available for the common stock, after adding $87,500 to the fixed charges of the company, are $62,500, or two and one half per cent on the par value of the stock, on which one per cent can be safely paid. Without any reduction of the par value of his security, the common stockholder at once receives an income. Such a case as this is, however, seldom encountered. Preferred dividends, when cumulative, are usually paid, even at the sacrifice of the permanent interest of the corporation. There are few cases of accumulation so great as to seriously depreciate the value of the common stock, and when this has occurred, as in the Republic Iron and Steel Company, and the Crucible Steel Company, earnings have usually recovered so as to permit the discharge of these back dividends without any scheme of reorganization. Wherever preferred dividends are allowed to accumulate to unmanageable proportions, however, the method above outlined will be found in most cases desirable.

Stock may also be reduced by exchanging into bonds with the consent of the statutory proportion of the stock. This method is applicable to seven and eight per cent preferred stocks issued by companies which are later able to place junior issues of bonds at fair prices. The most notable instance of such a conversion is that of the United States Steel Corporations bond conversion in 1902. On April 17, 1902, the president of the United States Steel Corporation issued a circular to the stockholders, which invited their coöperation in a plan to raise $50,000,000 of new capital. Half of this amount was to repay loans incurred by the constituent companies for construction work which was, in part, ren-

dered unnecessary by the merger, but which, owing to advance commitments, could not be suspended. In addition, $25,000,000 was required for improvements, which, it was stated, would effect an annual saving of at least $10,000,000. The plan proposed to the stockholders for raising this money was "to rearrange your corporation's capitalization (which, in round numbers, now consists of $300,000,000 of bonds, $500,000,000 of preferred stock, and $500,000,000 of common stock) by substituting for $200,000,000 of the preferred stock, $200,000,000 of sinking fund sixty-year five-per-cent mortgage gold bonds, and by selling $50,000,000 of additional bonds of such issue for cash. As the preferred carries seven per cent dividends, while the bonds would bear but five per cent interest, the $50,000,000 desired could, in this way, be added to the corporate resources, and the aggregate of the annual charges for interest and dividends, instead of being increased $2,500,000, would be decreased $1,500,000 as compared with the present sum total of these two requirements."

The plan offered to each preferred stockholder the right to subscribe to the new bonds to the extent of one half his holdings of preferred stock, forty per cent of each subscription to be payable in preferred stock, and ten per cent in cash, or the subscription could be limited to forty per cent, in which event no cash payment was required. This transaction was assailed in the courts, and was delayed for a long period by injunctions. It was finally abandoned after $150,000,000 of preferred stock had been converted. Conversion of stock into bonds such as this plan provided, can only be justified when the company making the conversion is so strong in surplus earnings that the issue of the new bonds will not jeopardize its solvency. Given this assurance, the advantage to the common stockholder is in the reduction of the payments which must precede his dividends, from the rate on the preferred stock to the rate of interest on the bonds issued in exchange.

We next take up the readjustment of the debt liabilities

of the company, dividing these into current liabilities, short term notes, and long term bonds. Current liabilities, when they exceed the normal amount in a particular industry, must be paid, either by the sale of some of the assets, or by the sale of bonds or notes. The methods of handling short term notes have already been discussed in Chapter XXIII.

When these are issued on the security of collateral, if a favorable opportunity arises to sell the collateral, provision is usually made for its retirement before maturity. When they mature, the method employed is either to sell the bond collateral and so obtain the means of payment, or to extend the notes, or to issue a new series of notes, or to take up the notes with an issue of stock. In most extension agreements, inducements are offered, usually in the form of higher rates of interest, or better security on the new issue. A syndicate may be organized to purchase the securities which are to be issued to take up those maturing, and then to offer to the holders of the maturing obligations the right to take the new securities on a favorable basis. The ordinary inducement is a cash premium.

The method of carrying through such a transaction is shown by the refunding of the $6,000,000 of four and one half per cent collateral trust notes issued by the Chicago, Rock Island & Pacific Railway Company in 1906. When these matured in April, 1908, the bond market was not in a condition to justify the offering of a long term security. The company, therefore, notified the note holders that it had arranged with Speyer & Company for the extension of these notes for one year, with interest at six per cent, subject to redemption at the option of the company on sixty days' notice. It was stated that "Holders who desire to extend their notes must present them, the April 1st coupon, at the office of Speyer & Company, on or before March 23d. A cash payment of $5 on each $1,000 note extended will be made to the holders availing themselves of this offer. Holders who do not desire to extend will receive par for their notes on April 1."

Speyer & Company had arranged with the Railway Company to purchase such an amount of the new notes as were not taken by the holders. The six per cent notes were offered at 99.5, yielding 6½ per cent per annum, so it is fair to presume that Speyer & Company did not pay over 95 or 96. The more advantageous the extension offer is made, the easier will be the terms that can be arranged with the syndicate, since every note replaced with a new note lessens the financial liability of the bankers.

A special method of funding floating debt, which has been used for the relief of embarrassed companies, is the funding or deposit of interest coupons. This may be accomplished by several methods: arrangements may be made with a syndicate to purchase the amount of coupons which it may be impossible for the corporation to pay, taking the corporation's bonds as security, or the bondholders may be asked to take stock or bonds in lieu of their coupons, or they may be asked to deposit their coupons with some designated agent or trustee, foregoing their claim for interest during the period. The first plan of funding coupons is illustrated by the following announcement to certain bondholders of the Erie by President Underwood on June 11, 1908:

To the Holders of Prior Lien Bonds and General Lien Bonds Under the First Consolidated Mortgage:

"The extraordinary business depression, which has seriously affected all the railroads throughout the United States, has so reduced the net earnings of the Erie Railroad that there will be a deficit below the amount necessary to meet fixed charges for the current fiscal year ending June 30, 1908. While it is confidently expected that with any return to normal business conditions this deficit will promptly be made good, it is necessary for the company temporarily to obtain the amount from other sources.

"To this end, among other things, it has been arranged that the coupon for interest falling due at any time prior

to July 1, 1909, may be purchased for cash and, with unimpaired lien, deposited and pledged under the collateral indenture of April 8, 1908, as additional security for the six per cent collateral gold notes issued and to be issued thereunder, thus making the notes more available to the company as a means of obtaining further cash if required, such notes to be accepted at par by the purchasers of the coupons for the amounts advanced for such purchase. While such temporary relief will probably suffice for the maintenance and operation of the property during the current calendar year, it will not be sufficient for the completion of the improvements begun two years ago, but which have not yet reached a condition where they are available for producing additional revenue for the company.

"It was anticipated that the funds for such improvements could be provided from the sale of your company's general mortgage bonds, but, principally owing to the injury done to your company's credit by the falling off in earnings during the existing business depression, such bonds are not now salable, except at prohibitive prices.

"As these improvements all serve to strengthen the security of the prior lien and the general mortgage bonds, it is expected that a plan will shortly be prepared for funding the coupons maturing on these bonds for a period sufficiently long to enable the company, out of its current funds, to complete the improvements now under way, and thus get the benefit of the large expenditures already made, but which, as above stated, remain as yet unproductive.

"You are therefore notified that your coupons, falling due July 1, 1908, will be purchased at par for cash by J. P. Morgan & Company, upon presentation and surrender thereof, on or before June 30, 1908, at their office, No. 23 Wall Street, New York."

The foregoing plan involved the sale to a syndicate of a sufficient amount of the collateral trust notes of the company

to take up maturing coupons. The coupons so purchased, aggregating $3,160,480, were to be pledged under the indenture of the collateral trust notes, and the bankers accepted for their advances an equal face value out of $4,500,000 of the $15,000,000 note issue of 1908 which had been reserved. When these notes were paid, the liability of the company, on account of these coupons, lapsed.

This relief to the finances of the Erie was not considered sufficient, and a further proposition was made to the bondholders, that they should accept bonds of the company, instead of cash, for the coupons. This proposition, as finally approved by the Public Service Commission for the Second District of New York, was as follows: The company was to issue $30,000,000 par value of collateral trust thirty year five per cent bonds secured by general mortgage bonds which had been authorized but which, as the statement of President Underwood shows, could not be sold at reasonable prices. These bonds were to be exchanged for coupons on the general lien and convertible four per cent bonds up to the amount of $11,380,000, on the basis of par value of bonds for the face value of the coupons. The company, on its part, agreed to expend from income every six months, for improvements and additions to the property, an amount equal to the interest so funded which had accrued during the six months, this arrangement to continue for the five years during which the funding of coupons was to go forward. The advantages of this arrangement to the company and to the holders of these junior mortgage bonds were as follows:

The company was relieved of the necessity of paying interest, which at that time was not being earned, and was assured of $11,380,000 of new capital within five years on which it paid five per cent interest. The refunding scheme did not relieve it from the obligation of providing the money necessary to pay the interest on these junior lien bonds, but enabled it to apply this money to the improvement of the property. To the bondholder the advantages of the reorgani-

zation were even more apparent. They were set forth in a statement issued on behalf of the company as follows:

"We have put into the property in the last few years upward of $16,000,000 that has not been capitalized—$8,154,381 charged against income and $8,345,829 charged to capital account, and not yet represented by any bonds. In seeking to capitalize these expenditures, we are asking the assistance of our bondholders instead of outside investors, believing that we can get such assistance from the bondholders on much more favorable terms. As you will notice, the coupons are to be exchanged for the new bonds at par, whereas on the balance of the issue not consumed by the funding of the coupons or the refunding of the three year notes, the Public Service Commission fixes a net price to the company of 87½.

"We have, awaiting completion, on the Erie & Jersey Railroad and the Genesee River Railroad lines and others, important improvements in the shape of cut-off and low-grade lines into which we have put millions of money. We are not yet in a position to reap the benefit of these improvements because it will require several millions to complete them, and we do not feel that we can take the amount necessary to complete them from operating income. Therefore we are undertaking to defer the interest on the general lien and the convertible four per cent bonds and to put the equivalent amount into the completion of the improvements in question, so that at the end of the five years, the road will be in a position to take up all its obligations and operate at a profit.

"There is hardly any question as to our ability to do this. In every year from the reorganization until last year the Erie showed a surplus, including coal properties, of from $4,000,000 to $7,000,000 over its fixed charges. Last year, on account of the extraordinary conditions, there was a deficit, but the first six months of the current fiscal year show a surplus from operation, and when the revenues from its coal

are taken in, there is a surplus of $2,000,000 for the six months. This is after all the interest has been paid, including that which it is now proposed to defer, so that I do not think there is any reasonable possibility of our being unable to put the required amount into the property out of income from year to year."

If the Erie did not obtain new capital, it must abandon improvements on which a large amount of money had already been expended and which were as yet unproductive. Unless this work could be carried through, the prospects of the company were gloomy. With the new capital, however, there was every reason to believe that the Erie could be placed on a basis of assured solvency, and that no such desperate remedies as that explained in the announcement of President Underwood would in fact be necessary. The bondholders were not asked to forego their interest. They were merely invited to invest their interest in the five per cent bonds of the company, which would be well secured and marketable at a price near par. The plan of the Erie for the funding of coupons was unusually favorable to the bondholders. They were to receive their interest in the form of salable bonds, but were assured that the amount of the interest would be invested in the property. It was not found necessary to put this plan into operation, owing to the improvement in the bond market, which enabled the Erie to obtain the necessary money by selling its bonds as originally contemplated.

In most cases, the bondholders do not receive so much consideration, the alternative being presented to them of either depositing their coupons and foregoing, for a time, their claim to interest, or taking the chances of bankruptcy. In return for the deposited coupons, the company may issue negotiable receipts. The usual method, however, is a simple postponing of interest without equivalent. The first method is illustrated by the plan for funding the coupons due from August 1, 1908, to February 1, 1912, on the first mortgage bonds of the Hudson River Electric Power Company. This

contemplates the issue of $4,000,000 collateral coupon notes in exchange for the coupons dollar for dollar: "In case of default for thirty days in payment of interest, then so much of the principal of the notes as is represented by deposited coupons whose dates of maturity shall have been reached, shall, at the election of the trustee, upon the request of the holders of sixty per cent of the outstanding notes, become immediately due and payable. And in case of thirty days default in the payment of any portion of the principal of the notes, the trustee shall, upon demand, restore to the respective holders the coupons uncanceled." The deposit of coupons without a return from the company is illustrated by the action of the bondholders of the Deschutes (Oregon) Irrigation Company who unanimously agreed on February 10, 1908, to surrender to a committee of the bondholders the coupon due March 1, 1908, and also, if the committee so requested, the coupon due September 1, 1908. The company was expected eventually to pay these coupons with interest at six per cent, but in the failure to do so, or in the event of a receivership, the bonds themselves were to be deposited with the committee. Here is a postponement of interest for the benefit of a temporarily embarrassed corporation. Action such as the foregoing is prudent. The bondholders do not care to take over the property with the responsibilities of its management. The expenses of receivership and reorganization might subject them to heavy losses. When they can be readily reached, and the proposition clearly presented to them, it should not be difficult to persuade bondholders to defer their demands for interest, in order that the company may bridge over a temporary embarrassment.

Taking up now the readjustment of long term bonds, we have, first, the conversion of bonds into stock; this has been already fully discussed under the head of convertible bonds. In Chapter XXIV it was shown that the advantage to the company in using convertible bonds which were eventually exchanged for stock was, in effect, the sale of stock at a

higher price than could have been obtained for the stock in the market and also, upon conversion, a reduction of its fixed charges and a resulting improvement of its credit. The advantage to the stockholder is an opportunity for a speculative profit, or to exchange his four or five per cent security, for a stock whose dividends may rise to such an amount as to show him a large yield on his investment.

The usual adjustment necessary in long term bonds is the conversion of one issue into another. We have already discussed at some length (in Chapter VII) the general inexpediency of providing for the payment in cash of bonds at maturity. Such provision can only be made by the accumulation of a fund in interest-bearing securities, or to pay off the debt, during its life, by installments, out of the income. Since a growing corporation is continually in need of money for improvements, and since the return on such expenditures is usually far greater than the return on any securities which could be purchased for the sinking fund, it is for the interest of the company, instead of accumulating a sinking fund in bonds, to spend the equivalent of the sinking fund on its property. Such a policy, however, makes no special provision for the repayment of bonds at maturity. Its object is to make the corporation so strong in assets and earnings that when its bonds mature, there will be no difficulty in placing a new issue which can either be exchanged directly for the maturing bonds, or can be sold for cash for an amount sufficient to pay off those bonds whose holders wish to change their investment.

An additional reason for refunding bonds, instead of accumulating a sinking fund to pay them, is found in the fact that new enterprises usually pay high rates of interest, owing to the limited demand for such unseasoned securities. If the corporation succeeds, its credit will improve to the point of placing bonds at much lower rates. When bonds mature, a considerable saving can therefore be made by taking them up with other bonds bearing low rates.

Refunding of bonds may take place either before the bonds mature, or at maturity. If bonds are issued subject to call at a fixed price, no difficulty is presented in retiring them. If, for example, a corporation issues $1,000,000 of six per cent bonds at 90, callable at 105 after three years, and if its credit improves to the point of selling a five per cent bond at 95, it is profitable for the company to call the six per cent bonds, replacing them with an issue of 5s. The economy of the transaction can be represented as follows:

Amount of five per cent bonds at ninety-five required to produce $1,050,000	$1,105,262
Interest at five per cent on these bonds	55,263
Interest on the six per cent bonds which are retired,	60,000
Annual saving	4,737

Conversion before maturity is sometimes made in order to provide for new financing with first mortgage bonds without the provision in the mortgage that these bonds can be issued for securities purchased. The opportunity may arise for acquiring control of desired properties, by exchanging bonds which carry stock control with them. The bonds outstanding under the first mortgage, however, present an obstacle to this transaction. In such a case, the bonds could be called and replaced with a new issue secured by a mortgage containing the desired provision. When such a conversion is contemplated, the cost can be greatly reduced if a large amount of the bonds, whose holders are not entitled to information concerning the intention of the buyers, can be purchased at the regular market price. The five per cent bonds, for example, which might be callable at 105 would not sell for more than 95. In anticipation of the conversion, arrangements could be made with the house which placed the bonds to accumulate as many as possible, in the interest of the corporation, at the market price. In this way, the premium need only be paid on those bonds which it is impossible to secure.

When bonds are not callable before maturity, and if they cannot be purchased at reasonable prices in the interest of

the company, certain inducements must be offered to the holder. These may take the form either of better security on the new bonds, or a higher market value in the new bonds than those which are retired, or a bonus of cash or stock. An illustration of the method of accomplishing such a refunding is furnished by the readjustment of the bonded debt of the St. Louis & San Francisco in 1901. It was proposed to take up thirteen underlying issues secured, for the most part, by first mortgages on certain portions of the company's property, by issuing a refunding fifty-year mortgage bond, of which $62,500,000 were reserved for refunding purposes. By unifying the indebtedness of the sytem, the company not only reduced interest charges, but was also enabled to finance additions by selling bonds having an established market value. A syndicate was formed under the management of J. & W. Seligman, which agreed to purchase for refunding purposes $30,000,000 face value of the refunding mortgage bonds. The syndicate then made the following offer to the holders of the underlying bonds:

"*To Holders of the Following Underlying Bonds:*

"As Syndicate Managers of a syndicate formed under an agreement dated April 4, 1901, we have arranged with the St. Louis & San Francisco Railroad Company to purchase, for refunding purposes, $30,000,000, face value of its proposed Refunding Mortgage Gold Bonds, to bear interest at the rate of four per cent per annum, and hereby offer to exchange such refunding bonds (to the extent to which they may be so issued and acquired by the syndicate), for underlying bonds of the railroad company's system, on the following basis:

For Each $1.000 Face Value of the Following Outstanding Bonds	In Refunding Bonds, Face Value	Cash	Market Price (*Added*)
			Range on June 8, 1901
1. 6% Second Mortgage A, B and C Bonds........	$1,166.66	113¾ and int.	112–114⅛
2. 6% Missouri & Western Division First Mortgage Bonds........	1,282.05	125 " "	
3. 6% Trust Bonds of 1880..	1,282.05	125 " "	
4. 6% General Mortgage Bonds..............	1,369.23	133½ " "	134–135¼
5. 5% General Mortgage Bonds..............	1,194.87	116½ " "	118–118½
6. 5% Trust Bonds of 1887..	1,179.49	115 " "	102½–112
7. 6% St. Louis, Wichita & Western First Mortgage Redeemable Bonds...............	1,179.49	115 " "	
8. 6% Fort Smith & Van Buren Bridge First Mortgage bonds (redeemable)...........	1,128.20	110 " "	
9. 5% Southwestern Division Bonds (redeemable).	1,025.64	100 " "	
10. 4% Central Division Bonds (redeemable)...	1,051.28	102½ " "	
11. 4% Kansas City Division Bonds (redeemable)...	1,000.00	97½ " "	
12. 3% Kansas City Division Bonds (redeemable)...	876.93	85½ " "	
13. 4% Northwestern Division Bonds (redeemable)................	1,051.28	102½ " "	
14. 4% Red River Division Bonds..............	974.35	95 " "	
15. 4% Consolidated Bonds..	1,025.64	100 " "	

"At the time of deposit, holders of underlying bonds will receive payment in cash of the unmatured interest accrued and accruing upon their deposited bonds to July 1, 1901, from which date the refunding bonds are to bear interest."

A comparison of these two tables with the third, giving the current market quotation of the more important of these underlying bonds, shows the advantage to the holders of accepting the syndicate's offer. The price offered was, in every

case, higher than the current market quotation. Furthermore, the bondholders received in exchange for bonds included in various small issues, the bonds of a large issue which they could readily market, and which would be accepted by banks as collateral security to a high percentage of their par value. These bonds were offered on an exchange basis, at prices which were, on the whole, more favorable than could have been secured in the market. The offer in cash was slightly below the offer in bonds, and the only question which could arise in the minds of the holders concerning the acceptance of the bond offered, was whether the new four per cent bond would sell at par. At the time, there was every indication that the new bonds would sell at a high price. For the nine months ending March 31, 1901, the St. Louis & San Francisco had shown surplus earnings over fixed charges of $1,451,817, and it was estimated that, for the year, these surplus earnings would be $1,725,000. The direct saving in interest by the refunding, in case all the bonds were got in, was $70,000. In addition, it was expected that earnings would be largely increased as a result of capital expenditures then in progress. The sequel proved, however, that of the holders of the underlying bonds, those who accepted the cash offer chose the better part. The general four per cent bonds have sold below par ever since that date. The offer by the syndicate of these favorable terms was intended to reduce the amount of cash required. If all the bonds could be called in and exchanged, the syndicate could pay for the $30,000,000 of refunding bonds with the old bonds, advancing only a small amount of money, and retaining the surplus amount of bonds for sale.

When bonds are called at maturity, they may be taken up with stock or with new bonds or with notes, or the old bonds may be extended. The methods of accomplishing these various forms of refunding have already been considered in connection with the handling of maturing note issues and require no extended discussion here. The usual method is to employ the bonds of an issue previously authorized for the

purpose of refunding. Careful provision is made in the mortgage for satisfying the claims of all maturing bonds, and for releasing the property from the underlying mortgages in order that it may come directly under the security of the general mortgage. When the bond market is unfavorable, notes may be employed to fund maturing bonds, or the bonds may be extended. In the latter case, extra inducements must be offered to the holders of maturing bonds to induce them to defer their claims.

CHAPTER XXXII

RECEIVERSHIPS

In our study of the corporate mortgage we have seen how large and sweeping are the powers of the trustee in reference to the disposition of the corporate property in the event of bankruptcy. The trustee has the authority to enter upon the property of the corporation and to operate it, collecting the receipts. Out of the receipts he is to pay its debts. He may also proceed against the company, and secure a sale of the property under the mortgage, applying the proceeds to the liquidation of its indebtedness. The theory of the mortgage, therefore, is that the property of a corporation which fails to pay its debts is to be seized by the trustee and sold, the proceeds being applied in satisfaction of its obligations. The powers of the trustee of a corporate mortgage have been taken over from the language of real estate mortgages. It is the custom, in case of default of interest or principal on debts secured by real estate mortgage, for the creditor to realize on the property of the bankrupt by having it forthwith sold under the authority of the court, compelling the owner to either bid enough at the sale to pay off the indebtedness or to forfeit possession of it. It is also customary in the settlement of the affairs of mercantile houses which become insolvent that the creditors should seize their stocks of merchandise and forthwith have them sold by the court for their benefit. While similar remedies are apparently preserved to the creditor of a corporation in the terms of the mortgage by which his bonds are secured,

the theory of the corporation mortgage cannot, in many cases, be carried out.

Most business corporations are organized in the field of manufacturing, mining, or transportation. They conduct their business with properties, which, unlike real estate or merchandise, are highly specialized to some particular use, and can be used for no other purpose. Take, for example, the property of a railroad. It consists of terminals, on which stand certain buildings which can be used for nothing else than the purposes of the railroad, of certain real estate in the form of strips of land 100 feet wide and thousands of miles in length, between which runs the track, consisting of rails, spikes, fish plates and ties, and laid in ballast. Over this track runs the railroad equipment consisting of cars and locomotives. We have here a different kind of property from a store building or a farm. The property of the railroad can be used for no other purpose than the transportation of passengers and commodities. If sold, it must be sold to another railroad company.

Furthermore, a railroad property is a unit. To the successful operation of a railroad, all the items above enumerated are essential. A railroad must have main lines and it must have branch lines. In many cases it must control coal mining companies which furnish it traffic. It must own large amounts of real estate at its terminal points, and must have the necessary number of cars and locomotives, a stock of materials and a cash balance. All of this property is necessary to the operation of the road. No part of it can be separated from the others and sold without destroying a large part of its value. Furthermore, a railroad company may have valuable charter and franchise privileges, without which its operations could not be conducted. It has built up over a number of years a wide-spreading business organization by means of which it obtains traffic. The value of this property depends on the income which can be obtained from its use. If we look on the value of the company's property as the capitalization of the net earnings accruing from the

operation of that property, we must admit that, to the earning of these profits, not merely a physical property but franchises and business organization are indispensable.

It follows, therefore, that if the creditors of the company should enforce the liens of their mortgages, and should take the property away from the company, especially in those cases where the different mortgages cover different portions of the property, in which event the enforcement of their liens will break the property to pieces, a large part of the value of this property will be immediately destroyed. In this value of the property, based upon its earning power, consists the security of creditors and the equity of stockholders. If, however, the creditors' claims are allowed to take their natural course of suit, judgment, attachment, and execution, the property of the company will be broken up, its working capital seized, the equipment hauled off its lines, its terminals taken from it, its organization destroyed, the franchises are perhaps lost and its earning power reduced to nothing. The effect is generally to make it impossible for the stockholders to recover any value from the wreckage, and to seriously jeopardize the security of even underlying mortgage bonds supposed to be fully protected by surplus earnings.

When a corporation approaches bankruptcy, it usually occurs that different portions of its property have been pledged as security for various issues of bonds. If the company is operating a railroad, for example, there are several first mortgages covering the different divisions of the main line of the railroad. Then over these is probably spread the lien of a general or blanket mortgage. Tributary to the main line of the railroad are a number of branch lines, and each one of these may carry mortgages to secure issues of bonds. These bonds have probably been delivered to the parent company in repayment of advances to the subsidiary company. The parent company may have pledged the bonds as security for an issue of collateral trust bonds. The equipment of the company may be covered by the lien of a car

trust lease. The company perhaps operates coal-mining companies which have bonds outstanding against them. The terminal properties may also be pledged as security for separate mortgages. In addition to all these complexities of obligations, there may be unsecured debentures outstanding, issues of short-time notes and bank loans, money due employés and to concerns which have furnished supplies and materials to the railroad. Suppose, now, each one of these creditors should undertake to enforce his claim against the company, which he has the undoubted right to do. Is it not evident that the property would be completely disintegrated in the contest of creditors? Each set of creditors would make off with a piece of the *corpus,* and the value of the property, after it had been torn to pieces by the creditors, would have little relation to its value as a going concern. The organization of the business would be broken up, its markets destroyed, its good will extinguished.

It is manifestly the concern of all parties that the creditors should be prevented from exercising their rights under their various mortgages and liens, and that the property of the company should be placed beyond their reach so that the continuity of its operations may be undisturbed, and its earnings may continue to accrue until such settlement of its affairs can be made as will preserve the value of the property. The unsecured creditors, if they obtain judgment and levy execution, can usually find some property to attach, some cash or materials which have not been pledged as security for any loan, but if they laid their hands upon the working capital of the company, they may compel it to cease operations, thereby reducing their chances of recovering anything more than what they have seized to zero. As for the secured creditors, if they sit passive and allow the merchandise and bank creditors to prey upon the company, they may find their own security rapidly disappearing. But if they enforce their rights, then neither stockholders nor unsecured creditors are likely to receive anything.

A typical situation resulting in an application for a receivership is described in a letter of President Bush, of the Western Maryland Railroad Company to the directors of that company in March, 1908, in which he sets forth the reasons leading to the receivership:

"The gross revenues of the railway for the six months ended December 31, 1907, increased $540,725, or 20.332 per cent, and the net revenues increased $350,176, or 30.224 per cent over those of the corresponding period of the last fiscal year, with a resulting surplus over all fixed charges, including the abnormally high cost of temporary loans and renewals.

"The company is not confronted with any failure of its revenues to cover its full fixed charges, and its business has maintained a steady growth with unmistakable assurance of continued development. It has, however, maturing obligations, arising out of its temporary provisions for capital expenditures, and it must at an early date encounter the problem presented by the commodity clause of the Federal rate law.

"As you are aware, this company has outstanding loans maturing April 1, 1908, to the amount of $3,776,750, secured by pledge of $5,037,000 of its first mortgage bonds. The market price of these bonds—originally in considerable excess over the loans, has, notwithstanding substantial increase in gross and net revenues, shrunk to a level below the face of the loans.

"It has now become apparent that the company will be unable to meet these loans or to provide additional collateral to secure their extension. In this situation, the company itself will, of course, be unable to borrow the money necessary to meet mortgage interest falling due on the first of April next."

It may be possible, in rare instances, to secure the coöperation of all creditors in deferring the enforcement of their

claims, and to give the company an opportunity to recover itself without the expense of a receivership. When there are only bondholders to consider, in case the holders of the number of bonds without which the trustee cannot be forced to act, can coöperate with the trustee in protecting the company, the necessary relief can be afforded without a receivership. Sometimes bondholders' committees will advance funds to meet pressing claims. As a general rule, however, creditors cannot be brought together, and the property must be protected against their assaults.

The property can be placed beyond the reach of the creditors by invoking the aid of a court of equity, the direct representative of the sovereign power of the state which created the corporation, one of whose recognized duties is to take charge of the estates of bankrupt individuals, firms, or corporations, and to preserve this property until the creditors can make a settlement with the bankrupt, or until a sale can be made of the property on more favorable terms than can be obtained by the creditors acting each for himself. The court takes charge of the estate of a bankrupt corporation through its agent, who is known as a receiver. The receiver is an officer of the court to whose charge is intrusted the estate of the bankrupt corporation. The judge, in placing the property of the company in the hands of a receiver, takes it away from the corporation, puts it out of reach of the creditors, and places it in a position to be secured, both from the mismanagement of officers and directors and the attacks of its creditors.

The reason for the appointment of a receiver has already been indicated, namely, to conserve the value of the company's property. He is often appointed at the instance of the directors who see long before any creditor the impending insolvency of the company, and who, at the first threat of disaster, fly to the shelter of a court of equity. The situation is something as follows: A federal judge is approached by directors of some corporation which is in difficulty, either in his court room or privately. Accompanying the directors

is a creditor of the company. The attorney of the company informs the judge, to whom in most cases he is well and favorably known, that his client, the A. B. Corporation, is insolvent and he produces a creditor as evidence of the fact. The creditor states that the company owes him certain money, and the officials of the company are there present to confirm that the debt is due, and that the company is unable to pay it. In the interest of all parties concerned, therefore, the court is asked to appoint a receiver to take charge of the property until a settlement of its affairs can be obtained. The plea is forcibly made that unless the court intervenes, by appointing a receiver, the creditors of the company will seize upon its property and will render it unable to perform its functions. It may be represented that the embarrassment of the company is due to special and exceptional causes, and that, if the court takes its property under its protection, a few months will suffice to extricate the company from its difficulties. This procedure is known as making out a *prima facie* case for the appointment of a receiver.

If the judge suspects no fraud in the matter, he forthwith appoints a receiver, first temporarily, until the other parties in interest can have an opportunity to be heard, and afterwards, unless good reason appears for discharging the receiver, the receivership is made permanent. While most bankrupt companies do not present such a complex situation as we have supposed, there are usually at least three conflicting interests to be considered: secured creditors, unsecured creditors, and stockholders. The stockholders, it is true, have no claim against the company for money loaned, but they have an interest in the company which will be sacrificed if its property is torn from it. It may happen, for example, that the embarrassment has been caused by the maturing of a note issue which, owing to the condition of the bond market, cannot be funded at that time. Otherwise, the company may be abundantly able to meet its obligations. The stockholders have here an interest which deserves recognition and protection.

The receiver whom the judge appoints is usually an official of the bankrupt corporation, often its chief counsel. The reason for making such an appointment is that the judge, not being familiar with the operation of a railroad or manufacturing concern, wishes to install one conversant with the business and who can carry it on successfully. If he appointed a stranger to the property, it might suffer injury. When a receiver is shown unfit to hold this position, or if it can be made to appear to the court that with a particular receiver in control of the property, bankers will not come to its assistance, the receiver may be removed. When large public companies apply for the appointment of a receiver, the court is usually careful that the appointment is acceptable to all interests concerned. President Bush, of the Western Maryland Railroad Company, for example, was appointed receiver of the property of that company. On the other hand, in 1893, President McLeod, of the Philadelphia & Reading Railroad Company, who was at first appointed receiver, was later forced to resign, owing to the opposition of banking interests who held him responsible for the failure of the company.

Immediately following his appointment, the receiver assumes possession of the property of the company under the authority of an order of the appointing court, which usually authorizes the receiver:

(1) To take possession of the property of the corporation; to keep this property in good condition and repair, and to operate the property just as the corporation operated it;

(2) to receive the income from the property and to apply this income under the direction of the court to the payment of operating expenses and fixed charges;

(3) to collect all debts due the company, and to defend all suits to which it may be defendant.

In the performance of these functions, the receiver may employ such counsel or agents as he may deem necessary.

He must ascertain as accurately as possible the status of the corporation, and make a report to the court. He must also make further reports from time to time, and must obtain express authority for any extraordinary action, such as the discontinuance of interest on bonds or the sale of certain property.

In carrying out his duties, it is necessary for the receiver to provide money. When he takes charge, he usually finds a large amount of wages and audited vouchers due and unpaid. The property of the company has usually been allowed to deteriorate, no money being spent out while the directors were endeavoring to tide over their period of trial. He also finds various issues of bonds whose holders set up a claim to the earnings accruing from the operation of the business. There are also claimants under the lease of property which it is necessary for the company to retain. This situation requires that the receiver should provide a large amount of money at once to liquidate the more pressing claims against the company. He must then take up the question of dealing with the various creditors who may in the meantime have brought suit, usually in the court which has taken charge of the property, to establish their various claims. In carrying out these duties, the receiver must raise a considerable amount of money. He has three sources to rely upon. First, such part of the income of the company as is not required to pay operating expenses, interest, and rentals; second, the interest and rentals themselves; and third, the use of a form of obligation known as the receiver's certificate.

The receivership may have been caused by the inability of the company to fund or extend an issue of short-time notes. Aside from this, the company may be solvent, able to pay all interest claims. If the property is earning more than enough to pay the fixed charges of the company from which it has been taken by the court, and in case the receiver elects to pay those fixed charges, he can use the surplus income in his hands to defray any proper expenses of the company. In but few cases, however, is this surplus income sufficient for

the receiver's needs. He must obtain additional funds. These he gets, in the first instance, by reducing the fixed charges of the company, by simply declining to pay certain amounts of interest and rentals. The creditors are powerless. The property which secures their obligations is in the receiver's hands, they can obtain their interest only by an order of the court. If, in the opinion of the receiver, whom the judge usually supports, the needs of the property require such action, he need pay no interest, and may apply all of the money which would otherwise go to the creditors, to pay the pressing obligations of the company. As a rule, however, when interest has been earned, it is paid by the receiver.

The owners of leased property need not submit, unless they desire, to the forfeiture of the rentals. The receiver has no title to their property; his possession of it depends upon his carrying out the covenants of the lease under which the corporation secured it. The lessor company, in case he fails to pay their rental, may, at any time, resume possession of the leased property, and may sue as general creditors for any unpaid balance on the rental or for any other damage which they may have sustained. When leases are profitable to the lessee, there is no danger that the receiver will run any risk of losing control of the property. With unprofitable leases, however, this method of refusing to pay rentals which have not been earned has been largely employed. Stockholders in the lessor company, in such a case, are deterred from acting in defense of their rights by the practical impossibility of making an advantageous arrangement for the disposition of their property elsewhere. In few instances, however, does the receiver carry his powers to this extreme. He is usually satisfied to pay interest and rentals where interest and rentals have been earned, and to refuse to pay only in those cases where the property has not produced a sufficient revenue to meet the specific charges upon it.

The disbursement of the revenues coming into the receiver's hands is made under the supervision of the court

appointing him. An illustration of the method usually followed is furnished by the following quotation from an order issued by Judge Lacombe, making permanent the receivership of the New York City Railway:

"In the matter of improvements the receivers are fortunately relieved, at least in part, from the burden of devising improvements in the system by the existence of the Public Service Commission.

"The receipts from car service will be devoted first to maintenance, including all necessary repairs and replacements. Next in order are certain fixed charges in the nature of rentals and interest falling due on various mortgage bonds of such roads, which by the terms of the leases, the New York City Railway Company has covenanted to pay. It would seem to be to the public interest, because of facility of transfer, that the roads which were being run by the City Railway when receivers were appointed, should be operated as a unit. For the present, therefore, the receivers will continue to pay such rentals and mortgage interest.

"This will not include the rental in the Third Avenue Railroad which will fall due the last of this month. A clause in the lease of that road provides that default in the payment of any installment of that rental cannot be availed of for six months. Long before that time sufficient information can be gathered (and made public) by the receivers to give such enlightenment as to the whole situation as will enable the court to deal understandingly will all questions as to payment of all these items of rent and mortgage interest.

"Before default is made in any case (except the one above referred to and the rental due October 15 to the Metropolitan Street Railway) petition will be filed setting forth all the facts bearing on the question and asking instructions, and a day will be fixed on which not only the parties to the suit, but all in any way interested (including the Public Service Commission) will be heard as to the most equitable and wisest course to pursue.

"Until further order, the receivers will also, if the other

parties to such arrangements consent, carry out the arrangements by which the New York City Railway Company operates certain railroads not under lease, such as the Dry Dock East Broadway & Battery Railroad and the Union Railway."

To obtain the money required, the receiver usually resorts to the use of receiver's certificates. A receiver's certificate is, in effect, a short-term note secured by a first mortgage upon all the property in the receiver's hands. It is true that when the property was in the possession of the company the title to the property may have been vested in trust for the payment of bonds with a trustee. By the appointment of a receiver, however, the court takes into its own possession the title to the property, and, like any other owner, can pledge any of its possessions as security for a loan. These certificates may be either without date, or they may run for a definite period. An illustration of the first kind of receiver's certificate is the following, issued in 1880 by the receivers of the Philadelphia & Reading Railroad Company:

> Receivers' Office, Philadelphia & Reading Railroad Company.
>
> Philadelphia, May 24, 1880.
>
> This is to certify that there is due to —— or order from Edwin M. Lewis, Franklin B. Gowen and Stephen A. Caldwell, receivers of the Philadelphia & Reading Railroad Company (and not individually) one thousand dollars, on account of money borrowed by said receivers, under order of court, for payment of wages and interest upon certain mortgage indebtedness of said company.
>
> This certificate is transferable by indorsement, and redeemable after ten days' notice by advertisement in one or more daily papers of the City of Philadelphia, of the readiness of the receivers to make payment at the expiration of which notice interest thereon shall cease.
>
> Receivers,
>
> (Signed) W. McKenna,
>
> Circuit Judge.

The later form of certificate is illustrated by those issued in 1910 by the receivers of the Illinois Tunnel Company:

> This is to certify that for value received Charles G. Dawes and David R. Forgan, as receivers of the Illinois Tunnel Company, and not individually, are indebted to the bearer hereof in the sum of one thousand dollars ($1,000), payable at the National City Bank of New York, in the City of New York, or, at the option of the holder hereof, at the Continental National Bank, in the City of Chicago, two years from the date hereof, in gold coin of the United States of America of the present standard of weight and fineness, with interest thereon at the rate of six per cent (6%) per annum, payable semiannually, in like gold coin, on the first days of October and April, upon presentation and surrender, at one of the places therein specified, of the coupons for said interest as they severally mature.
>
> This certificate is part of an issue of certificates of like tenor and date not exceeding in the aggregate the principal sum of three million five hundred thousand dollars ($3,500,000) at any one time outstanding, authorized by an order of the Circuit Court of the United States for the Northern District of Illinois, Eastern Division, dated the 16th day of March, 1910, and on said day filed in the office of the clerk of said court, entitled in two certain actions pending in said court and consolidated under the title of The Corporation Trust Company against Illinois Tunnel Company and Central Trust Company of Illinois, as Trustee, against the Illinois Tunnel Company, and others. This certificate is issued pursuant to and is entitled to the benefits and security specified in the foregoing order, subject to all the terms and provisions whereof this certificate is issued and held. Among other things it is provided in said order that:
>
> "Said certificates of indebtedness to the amount of the principal and interest thereof shall constitute a lien upon all the property of every nature and description of the defendant Illinois Tunnel Company, and upon the telephone system which may be constructed

> by the said receivers, and upon all equipment and other property that may be acquired or provided by means of the said certificates or the proceeds thereof, and upon all net earnings and income which may hereafter result from the operation of the property in charge of the said receivers, which lien shall be prior to the lien of the judgment received in this court by the Corporation Trust Company against the Illinois Tunnel Company on December 1, 1909, for $1,129,-428.64 and prior to the lien of the First Mortgage or Deed of Trust, dated December 1, 1903, made by the Illinois Tunnel Company to the Equitable Trust Company, Chicago as Trustee (under which indenture the Central Trust Company of Illinois is now the duly constituted and acting successor Trustee), and prior to the rights of the holders of any and all bonds issued under the said First Mortgage or Deed of Trust."

These obligations are managed like short-term notes. They may be issued to consolidate other issues of the same kind; they may be called at any time; or they may be extended at maturity.

Money is provided by receivers' certificates for various purposes. These obligations are usually issued in small amounts, soon after the receiver takes charge, to pay pressing claims, e. g., for wages and supplies. Larger issues may provide for repairs which are necessary to the operation of the property. As a rule, a receiver will go no further than this in asking authority to issue receivers' certificates. Bondholders can have no objection to the provision of money for the purposes indicated. It is true that the lien of the certificates precedes that of the first mortgage, but if the receiver did not provide the money, the property could not be operated economically and its value would dwindle to the injury of its creditors. Receiver Frederick W. Whitridge, who took possession of the Third Avenue Railroad on January 12, 1908, on May 9th, reported to the Chairman of the Bondholders' Committee, showing the situation arising out of the previous neglect of the property with which the re-

ceiver must promptly deal, if he is to maintain and increase its earnings. This portion of his report is, in part, as follows:

"*Physical Condition.*—The general conditions of the Third Avenue Railroad were very bad; there were no offices, no supplies, or material on hand; the shops had been neglected; the track was and is in very bad shape; the cars in need of extensive repairs. The power house alone was in good condition.

"The supplies and material immediately necessary, most of which has been received, amounted to $50,000. Sprinkling apparatus in all of the barns and the cost of the various other fire apparatus essential to secure new insurance, the old policies, after the repeated fires in the New York City Railway barns, having been nearly canceled, amounted to $135,000; I hope presently that the property upon the system will meet the requirements of the most exigent underwriters.

"*Car Repairs.*—Of the 567 cars delivered to me by the New York City Railway Company receivers, there was not one on which some work was not immediately necessary. I ordered a sufficient number of new motors and controllers (50) to fully equip every car in the system. I estimate the total cost of putting all the cars in order, including the new motors and other electrical equipment, to be approximately $300,000.

"*Repair to Track.*—In many places on the main line of the Third Avenue track the contact rail is completely worn away, the slot rail very thin, and the car rail worn to the breaking point. Paving of the tracks, in accordance with the city ordinance, with Belgian blocks, will save $5,000 or $6,000 a year in maintenance. Under a temporary arrangement with the New York City Railway receivers, we are to repair the crossings on joint account. Altogether there will be needed for the track this year about $436,000 and thereafter, with a liberal allowance for maintenance, I think

no further expenditure will be necessary for some years to come.

"*Buildings.*—The building at Sixty-fifth Street and Third Avenue needs extensive repairs to the roof, and in order to enable the shops to do their work certain other structural alterations are required, bringing up the total cost to about $151,000 for $14,821 of which amount I have let contracts.

"At 129th Street and Third Avenue there is, in front of the car barn, a building used as a hotel and several tumbledown stores or saloons. I propose to clean out the main building and construct therein proper offices for the Third Avenue and other lines; also accommodations for a club for the employees, which are much needed. The whole improvement will cost nearly $106,000."

To meet the cost of these and other improvements and payments, the receiver stated:

"I intend to ask the court for authority to issue $2,500,000 of receivers' certificates, payable within one year and bearing interest at the rate of six per cent. With those and the earnings from the property I think I can do all of the work and make all the payments which I have herein enumerated. It may be desirable to issue a certain number of certificates of the Union Railway, to an amount necessary to pay for the car barns, the Bronx & Pelham Parkway construction, and for the power station, not exceeding in all, however, $750,000, which could later be taken up by the Third Avenue certificates; or it may be desirable, while having authority, to issue certificates for the Union Railway, as above mentioned, as I already have authority to issue certificates for the Forty-second Street and the Dry Dock railways of which I have not availed myself, to issue Third Avenue certificates for the whole amount of $2,500,000 directly, as the bankers may prefer those to certificates of the other roads. If the certificates of those subordinate lines could be used permanently, the Third Avenue certificates should be diminished *pro tanto,* but in any case

only certificates for $2,500,000 for one year will be outstanding."

Cases may arise, however, when receivers must go much further in the issue of these obligations than the payment of accrued wages and the making of necessary repairs. The property of the company, as with the Illinois Tunnel Company, may be only in part completed. Unless it is finished at once, it may not be possible to secure profitable business. For example, in anticipation of the construction of a power plant, contracts with consumers may have been signed whose binding force depends upon the delivery of power before a certain date. The company may have failed, leaving the plant half finished, and a receiver takes charge of the property. He finds a rival concern ready to run lines into this section and seize the market for power. The receiver, under these conditions, may have no choice but to mortgage the property to obtain funds for its completion in order to deliver power and secure the benefit of the contracts. He takes this action as much in the interest of the creditors as of the stockholders. Unless receivers' certificates were issued, the power plant when finished would find its market absorbed by its rivals.

Existing creditors of the company are violently opposed to the issue of receivers' certificates of large amount and often appeal to the court not to allow the receiver to place this new encumbrance ahead of the lien on their security. Their pleas are, however, usually disregarded. The court stands by its own appointee, the receiver, and is usually guided, as to the necessity of the issue of certificates, by the receiver's recommendations. The amount of money which the receiver will spend upon the property depends on his conception of his duties. If he looks upon his obligation as merely to preserve the business, as it were, in a state of suspended animation, doing as little as possible to repair or improve the property, merely protecting it from the onslaught of creditors until the different interests can be adjusted and the receiver

discharged, he is not apt to issue more certificates than are necessary to pay the claims which press upon him in the form of unpaid wages, etc., when he takes charge of the property. If, however, he interprets the word conservation in its broad sense, he may conceive it to be his duty not only to preserve the property, but also to do all things necessary to increase its efficiency. In carrying out this obligation he may borrow large sums of money, and he may do a considerable amount of important work and even new construction. An illustration of this conception of the receiver's duties is furnished by the receivership of the Baltimore & Ohio Railroad Company.

The receivers appointed for the Baltimore & Ohio in 1896 were Mr. John K. Cowen and Mr. Oscar G. Murray. They were confronted with a difficult situation. The property of the company was in need of entire reconstruction. Ties, roadbed, rails, bridges, piers, cars, and locomotives were sadly in need of replacement or repair. The equipment of the company was particularly defective, a large number of freight cars and locomotives being out of service, and the equipment available for use being entirely insufficient to take care of the traffic offering. Moreover, the competitive situation of the Baltimore & Ohio was at this time peculiarly unfortunate. To the north lay the Pennsylvania, equipped to handle traffic at the lowest cost. On the south the Chesapeake & Ohio was a vigorous competitor, both for through traffic from the West and for the rapidly growing coal traffic out of West Virginia. Unless the Baltimore & Ohio was to abandon the field to its competitors, it must be placed in a position to carry traffic at the lowest possible cost. In other words, the Baltimore & Ohio must be entirely reconstructed.

Should the receivers reconstruct the road, obtaining funds by the issue of their certificates, or should they content themselves with keeping the system together and in passable running order, leaving the work of rebuilding to the officers of the company after it had been provided with funds in a reorganization? The receivers wisely chose the first

alternative, notwithstanding powerful opposition and a vigorous controversy between their friends and men who asserted that they were exceeding their authority as receivers. New capital had to be issued eventually. To delay the work of improvement meant at least temporary abandonment of the competitive field, and the loss of advantages which might never be regained. Mr. Cowen and Mr. Murray faced the issue squarely. As receivers of the Baltimore & Ohio they issued within two years $10,742,000 of receivers' certificates, in addition to a large amount of car-trust obligations. A portion of these certificates were exchanged for other evidences of indebtedness which had to be taken care of, but for the most part they were issued for new equipment, rails, and ties.

Immediately after taking charge of the property, in May, 1896, the receivers obtained authority to purchase five thousand new freight cars and seventy-five locomotives. In February, 1897, a thousand additional box cars were purchased, and in May of the same year five thousand one hundred and fifty more cars were acquired. During this year two thousand one hundred and fifty cars were obtained from coal companies on mileage contracts, and three thousand cars were leased from the Pullman Company. Besides these heavy purchases of equipment, during the first year of the receivers' administration two hundred and twenty freight engines, some of which had not turned a wheel for months, were sent through the shops and put into service. Special attention was also paid to the way and structure. The track from Baltimore to Pittsburg and Wheeling was practically all relaid with new and heavier rails and new ties. Bridges on the system, many of which were unable to bear the weight of heavy trains, were generally replaced; and large sums were spent on the construction of yards and sidings. Taking advantage of depressed times, one of the features of the receivership was the placing of an order for forty thousand tons of eighty-five-pound rail, said to have been the largest order ever placed for rails up to that time. The price was

seventeen dollars a ton. Not all the funds for these improvements were raised by the issue of receivers' and car-trust certificates. Earnings were heavily drawn upon, and in many instances bondholders were forced to wait until the property on which they had a lien was put into condition to earn the interest. In a word, the Baltimore & Ohio receivers rebuilt the road from end to end, and turned a new road over to the stockholders when the reorganization was completed.

This work, as intimated above, was not carried through without severe opposition. Suit after suit was brought by security holders to restrain the receivers from increasing the burdens of the property. It was urged that they were destroying the value of first mortgage bonds by their reckless issue of certificates, and they were advised that if new equipment was needed, it should be borrowed and not purchased. Their policy was denounced as a gross usurpation of power because, as it was charged, they ran counter to every precedent which should regulate the conduct of receivers. To this the answer was made that precedents were indeed violated, but that the situation with which the receivers had to deal was itself unprecedented. The receivers contended, and in this they were sustained by the court, that their policy was conceived in the interest of the bondholders, and they insisted that it be carried through to completion.

The policy of the receivers of the Baltimore & Ohio was abundantly justified during their term of office. During a period when the gross earnings of its competitors declined the earnings of the Baltimore & Ohio, as the direct result of its larger equipment and lower operating cost, materially increased. In 1896, gross earnings were $25,582,000 and in 1898, after the reconstruction of the property had been practically completed, they increased more than $2,000,000 in spite of a steady fall in rates. The contribution of reduced operating expenses to the result is seen in the increase of the operating ratio from 69.26 in 1895, a ratio which directly reflected the inefficiency of the property, to 78.23 per cent in

1898, which represented the expenditure of a large amount of earnings upon improvements. The effect of these improvements upon the operating efficiency of the road is seen in a decline in the operating ratio from 76.70 per cent in 1899 to 65.63 in 1900. The Baltimore & Ohio receivers took great risks. They applied a desperate remedy to a desperate situation. Their success on this account was all the more conspicuous and brilliant.

A receivership is an extraordinary remedy for an extraordinary situation. Like a surgical operation, although it may save the life of a distressed corporation, it usually leaves the patient in a weakened condition from which his recovery is slow. And for the same reason that intelligent physicians only resort to the knife after all milder measures of treatment have failed, so the owners and creditors of a corporation which has got into difficulties, consult their best interests, when they unite to tide over the crisis without resorting to the protection of the courts. As yet, however, such a degree of coöperation cannot be expected, and it is fortunate for the investor that the courts have generally shown wisdom and foresight in the administration of properties intrusted temporarily to their keeping.

CHAPTER XXXIII

THE REORGANIZATION OF BANKRUPT CORPORATIONS

THE reorganization of a bankrupt corporation is a settlement of the claims of the different parties in interest on such a basis that the property can be released by the court and again managed as a going concern.

As soon as possible after the receivers have been appointed, efforts are set in motion looking to the rehabilitation of the bankrupt corporation. The interests of all concerned point to a speedy settlement of its difficulties. As long as a corporation remains in the hands of the receiver, the values of its securities are low, owing to its uncertain future. Those persons whose capital is invested in these bonds and stocks are unable to find purchasers for their investments at fair prices, or to make loans upon these securities with financial institutions. Banks and trust companies which have taken these securities as collateral are, for the same reason, unable to dispose of the collateral except at a loss, even if they consider it expedient to further complicate an already difficult situation by such a drastic action. All interests are, therefore, equally concerned to reach a speedy reorganization of a bankrupt company. Unless an attempt is made to treat some interest unfairly, the operation is quickly concluded and a settlement is reached which preserves the integrity of the business, and equitably apportions among the different claimants the losses which have been sustained. The courts have also assumed the necessity of speedy reorganization, and have sometimes gone so far as to recommend to creditors and stockholders that they hasten to arrive at a

settlement of their difficulties in order that the receivers may be discharged.

The objects of the reorganization are as follows:

1. To pay off or fund the floating debt.

2. To provide funds for betterments and working capital and to arrange for future capital.

3. To reduce fixed charges within a conservative estimate of net earnings.

Reorganization, in almost all cases, requires that a large amount of cash should be provided. This money is required to pay certain kinds of current debt, to complete an unfinished plant, or for the reconstruction and repair of property whose physical condition has been allowed to deteriorate. Taking up first the floating debt which must be provided for, we find this usually divided into receiver's certificates and secured loans. The receiver's certificates, as already explained, constitute prior liens on the property, and must be paid in cash when due. We have also seen in the discussion of the issue of short term obligations that these are now almost invariably secured by a large margin of collateral. These notes have been usually taken by banks, trust companies or large individual capitalists. The collateral back of them consists either of bonds authorized under existing mortgages, or of securities owned by the corporation representing the control of properties which are indispensable to it. The holders of such notes are in a position to demand payment in full. Unless paid, they can sell their collateral and seriously embarrass those who are endeavoring to reorganize the company.

The physical condition of a bankrupt property is usually bad. In some cases the original financial plan has not provided sufficient funds to complete the plant which must be finished before it is of any value, and the property of going concerns has often suffered severely before receivers were appointed. The receiver, as we have seen, may do much to improve the physical condition of the property, but he is not likely to provide all the money necessary.

The reorganization plan should provide that the net earnings of the company, on a minimum estimate, should insure a safe margin above fixed charges. If the receivership has been due to the maturity of debt at a time when financing was not possible, a reduction of fixed charges may not be necessary. In the great majority of cases, however, adversity has disclosed the fact that fixed charges are too heavy for the earnings of the company, and opportunity is taken in the reorganization to reduce them. Unless this is done, at the next season of trial, net earnings may again fall below charges, and another surgical operation on the capitalization of the company will become necessary. It is seldom provided that fixed charges in the reorganization plan should be so much reduced that an estimate of net earnings based on present conditions will insure immediate payment of dividends. Such a course would be unfair to creditors. If reviving business increases earnings after the reorganization, to the point of dividend payment, that is the good fortune of the stockholders; but the creditors cannot be asked to submit to a greater reduction in their claims for interest and rentals than is sufficient to enable the company out of its net earnings to pay interest and provide for working capital, renewals and betterments. The information upon which any plan of reorganization must be based is usually supplied by the receivers who make for the court an exhaustive analysis of the situation of the company, its past earning power, the causes of failure, a schedule of its assets and liabilities, and an estimate of its cash requirements.

We see the objects of reorganization. How are these objects to be realized? The first step in carrying through a reorganization plan is usually the formation of committees to represent the owners of different classes of bonds. In some cases also committees are formed to represent stockholders. The purpose of forming committees is to secure united action on behalf of each interest concerned in the reorganization, and also to keep the various bonds and notes of the company from being thrown on the market and sacrificed. The forma-

tion of committees may not, it is true, be necessary. The receivers or the directors may themselves formulate a plan of reorganization, or they may appoint a committee to formulate such a plan to which they may afterwards invite the consent of the security holders. If the plan proves satisfactory, it may at once be put into effect. It is seldom, however, that such a quick method of settlement can be adopted. Holders of different classes of securities are unlikely to consent to any plan which they have had no hand in formulating.

The method usually employed in the formation of these committees is for individual bondholders to constitute themselves or their representatives a committee to take charge of the particular class of securities, and to invite the creditors or stockholders to signify their consent to this arrangement by depositing their securities with some disinterested agent, a trust company or bank. If a majority of the securities are thus deposited, the self-constituted committee becomes representative, and is recognized as such by the courts. The powers of these committees are very broad. The committee is vested with the legal title to all securities deposited with them, and is authorized to act in all respects in behalf of the depositors as though they were directors of a corporation elected for the purpose. The committee has all the powers of owners of the securities, and full discretion as to the methods of carrying out the agreement. The committee is authorized to institute suits or to intervene in suits, to sell the deposited securities under certain conditions, to employ agents, attorneys and counsel, to purchase property at foreclosure sale, to borrow money on the security of the bonds or stocks deposited with them, and also, usually, to prepare a plan of reorganization which, after reasonable notice has been given to the depositors under the agreement with the committee, and failing objection on their part signified by the withdrawal of their securities, is held to be binding upon all. The depositors are held to be liable for the necessary expenses of the committee up to a certain percentage on the

amount of securities deposited. It is usually provided that the committee may at any time terminate the agreement, and also to allow the bondholders to terminate it by a certain vote. The effect of the deposit of securities is to constitute the members of the committee trustees for the depositors, to form, as it were, a temporary corporation for the attainment of certain objects.

The committee, after conference with bankers, whose assistance is indispensable to the consummation of a plan of reorganization, after examining the condition of the property, its assets and liabilities, its record of earnings, and also after conferring with large shareholders and creditors, announce a plan of reorganization. This plan they may either announce on behalf of themselves or through bankers or individuals whom they may designate as reorganization managers. For example, J. P. Morgan & Company on June 1, 1909, made the following announcement to the holders of debenture stock, Preferred stock A, Preferred stock B, and Common stock of the Chicago, Great Western Railway Company:

"At the request of the London Committee for Debenture Stock of the New York Committee for Debenture Stock, and of the New York Committee for Preferred Stock A, Preferred Stock B, and Common Stock, the undersigned have consented to act as Reorganization Managers in carrying out a Plan for the Reorganization of the Chicago Great Western Railway Company."

So far as the securities affected by the plan have been lodged with a committee, the assent of the committee to the plan is held to be binding on the depositing bond or stockholders unless they signify their dissent within the time named in the agreement with the committee, by withdrawing their securities. Holders of securities which have not been deposited are given a certain time to consent to the plan. This time limit is often extended, but unless the deposits are made

within the time stipulated by the committee, nonassenting bond or stockholders are held to be excluded from the benefits of the plan and must take their chances like anyone else in a foreclosure sale.

Coming now to the consideration of the reorganization plan, we find that the property may be either returned to its former owner, or it may be transferred under foreclosure sale to a new company. It sometimes happens that there are distinct advantages in reorganization without foreclosure sale, employing the same company which controlled the property before the default. Companies may have valuable privileges in the form of exemption from taxation, or authorization from the state to engage in enterprises such as the carrying on of coal mining and railroad operations under the same organization, which may have been forbidden to corporations since a particular charter was granted. In such cases, the reorganization plan usually contemplates the return of the property to the existing company. The Philadelphia & Reading Railroad Company, for example, went through two reorganizations because its charter privileges were too valuable to be surrendered.

The usual method is, however, to organize a new company in which is vested after foreclosure sale such portions of the property of the old company as it is thought wise to retain, and which either assumes the obligations of the old company in their original form, or secures such modifications and reductions in their amount as are necessary to the success of the new company. The advantage of this method is that, by the foreclosure sale, all the rights of nonassenting security holders are extinguished, and the new company is placed in complete control of the property which it desires. It is customary, even when a new company is employed, to use a name closely resembling that of the old company. A rail*road* company, for example, will be succeeded by a rail*way* company, and *vice versa*.

After the new company is organized, it authorizes the issue of certain securities. The Chicago & Great Western

Rail*way*[1] Company, the successor of the Chicago & Great Western Rail*road*[1] Company, authorized $28,000,000 of first mortgage, fifty year four per cent bonds, $50,000,000 of four per cent preferred stock, and $46,000,000 of common stock. The Western Maryland was reorganized by the formation of a new company which took over the property of the old company subject to its first mortgage and its underlying and divisional bonds, and which authorized $10,000,000 of noncumulative four per cent preferred stock, and $60,-000,000 of common stock. The securities of this new company are now offered for subscription. The subscriptions are paid either in cash, or with the securities of the old company, or, in rare instances, with the guarantee of another corporation. In the fulfillment of the conditions of subscription, the objects of reorganization are accomplished.

Advantage is usually taken of this opportunity to simplify the capitalization of the company. Especially has this been done in reorganizations of large railway companies. The formation of a new company which issues its bonds and stock in exchange for those of the old, makes possible the concentration and simplification of the capitalization. It unites branch line and terminal certificates, car trust certificates, equipment bonds and other obligations under single issues which are more easily managed, better secured and of higher values than those which they displace. The property of the Northern Pacific Railway Company, for example, before its last reorganization, was owned by fifty-four corporations which had issued $380,000,000 of stocks and bonds. The circular of the reorganization committee described the old plan of capitalization as follows:

"As it now stands, the system, in its form of incorporation and capitalization, is a development without method or adequate preparation for growth. Scarce any single security is complete in itself. The main line mortgage covers neither feeders nor terminals. The terminal mortgages may be be-

[1] Italics are the author's.

reft of their main line support. The branch line bonds are dependent upon the main line for interchange of business, and the main line owes a large part of its business to the branch lines."

The plan of reorganization of this company reduced the number of these obligations, and greatly simplified the capitalization of the company by subjecting the entire system to the lien of two bond issues, one following the other. Sinking fund provisions, which have proven embarrassing to the corporation, may also be eliminated. An adequate bond reserve may be provided under which, with proper restrictions, future issues of bonds for the capital needs of the company may be made. The company may also save in the exchange of securities by retiring high interest bonds issued on branch lines where the security is not perfect, with lower interest bonds secured by mortgage upon the entire property. All these methods of reorganizing the capital account have been fully explained in Chapter XXXI. They are freely employed in the reorganization of bankrupt corporations, because the transfer of the property from one company to another furnishes an excellent opportunity for such readjustments.

A more important use is found for the securities of the new company in providing the cash required in the reorganization, and making the necessary reduction in fixed charges. In most reorganizations, as already observed, a large amount of cash must be provided. The cash requirements of the Baltimore & Ohio reorganization plan, for example, in 1896, amounted to $36,092,000. The reorganization managers of the Erie had to provide $19,344,000. More recently, the Chicago Great Western, a comparatively small company, provided $24,892,274 in its reorganization. This cash is obtained by subscription to the bonds and stock of the new company.

Efforts are first made to interest the stockholders who are invited to participate in the reorganization. To the committee in charge of the reorganization is presented this

problem: "If we take over the property at a foreclosure sale, and exclude the former stockholders, it will be necessary for us to provide the cash required. The money can probably be raised, it is true, by the sale of first, or first and refunding mortgage bonds, but since one object of reorganization is to reduce rather than increase the debt of the company, it is desirable to keep down the new bonds issued to the lowest possible figure. The only practical alternative is to induce the stockholders of the bankrupt company to furnish the funds required."

The offer to subscribe to the securities of the new company is made to the stockholders in one of two forms. They may be told that their company has failed; it is unable to pay its debts, its creditors have liens upon all its properties. Unless the stockholders are prepared to furnish the money necessary to pay these debts, the property must be sold by the court and the stockholders will lose all chance to recover their loss. In the foreclosure sale, the various evidences of debt, no matter how much their interest may be in default, or how worthless they may be in the market, will count, as against any inferior lien, at 100 cents on the dollar. Therefore, if the stockholders desired to compete at the sale, they would be at a hopeless disadvantage, since it would be necessary for them to match, dollar for dollar, with cash, the various bonds which will be presented as a means of payment by the creditors. The creditors, therefore, control the situation. They propose to organize a new company to take over the property of the bankrupt corporation, since they realize the necessity of keeping the property together.

The creditors, however, do not desire to take undue advantage of their position. They will give to the stockholders the privilege of joining with them in this new company. They make to the stockholders the following offer: to sell them preferred stock in the new company for, say, $20 per share, and common stock for $10 a share. "We have every reason," they say, "to believe that with the indebtedness paid, funded or reduced within a conservative

estimate of earnings, and with good management, the new company will be more successful than the old. We are confident that if you purchase stock in the new company on the basis proposed, you will have no reason to regret your action."

This was the proposition which, in substance, was made to the stockholders of the Westinghouse Electric & Manufacturing Company, on April 8, 1908. The stockholders committee of this company sent out a circular letter outlining a plan of reorganization in substance as follows: Certain bonds of the company were to remain undisturbed. The floating debt was in part to be converted into stock and in part funded into bonds and notes. The stockholders were to subscribe at par for $6,000,000 of new stock. The proposition to the stockholders was as follows:

"The chief difficulty with the company and the principal cause of the receivership are found in the fact that, as the result of the rapid expansion of its business, too large a proportion of its investment is represented by debt. If a substantial reduction can be made in the debt by the sale of additional stock, it is believed that the receivership can be promptly terminated with every prospect of the company entering upon a career of renewed prosperity. On this point the committee, of which Mr. Jarvie is chairman, in their circular of April 2, 1908, say:

"'The committee believe that if the conduct of the business can promptly be restored to the stockholders under the direction of a strong board of directors, the company will continue to make substantial earnings. On the other hand, there can be no doubt that a continuation of the receivership for a considerable time, and a forced liquidation of the assets, would be disastrous to the creditors as well as to the stockholders.'

"The Merchandise Creditors' Committee have shown their confidence in the company and its future by undertaking to secure the exchange of, at least, $4,000,000 of the

company's floating debt for 'assenting stock,' at par. They, however, impose the condition that the remaining $6,000,000 of the $10,000,000 of subscriptions required to terminate the receivership and place the company in a safe position shall be furnished by the stockholders. It is for the purpose of securing from stockholders subscription to this $6,000,000 of stock that the undersigned committee has been formed.

"The holders of the preferred and common stock of the company are, therefore, asked to subscribe for 'assenting stock' of the company at par, at the rate of at least one share of new stock for every four shares (or fraction thereof) of existing stock. Such subscriptions are to be payable in the following installments:

25 per cent on May 25, 1908,
20 " " " August 1, 1908,
20 " " " November, 1, 1908,
20 " " " January 1, 1909,
15 " " " April 1, 1909.

The deferred payments are to bear interest at the rate of six per cent per annum, with the privilege to subscribers to pay their subscriptions in full at any time.

"The Merchandise Creditors' plan cannot be carried into effect unless the stockholders protect themselves by subscribing pro rata for their shares of this new stock. If these subscriptions are not forthcoming, the inevitable result will be that the Readjustment Committee, which was organized for the protection of creditors, will be forced to reduce the debt of the company to judgment, bring about a forced sale of the property and its acquisition by a new corporation organized in the interest of creditors. Such a course would result in enormous loss which would fall chiefly upon the stockholders of the company. That loss can be avoided only by the coöperation of stockholders in promptly subscribing for a sufficient amount of new stock to insure an early termination of the receivership.

"The committee wish to lay special emphasis upon the fact that the success of this plan for saving the company for its stockholders requires the unanimous compliance of stockholders, however small their holdings, with this request for subscriptions. The ownership of the stock of the company is divided among about 4,000 stockholders, the average holding (excluding the holdings of the Security Investment Company and its president) being only about eighty-three shares (par value, \$50). Most of the stock owned by the Security Investment Company has been pledged as collateral in comparatively small amounts with a large number of banks which are being asked to subscribe to the new stock in proportion to their respective holdings."

Subscriptions to the stock of the Westinghouse Electric & Manufacturing Company were largely influenced by this express threat that failure to procure the required amount would subject the stockholders to the danger of foreclosure sale.

The situation of the Westinghouse Electric & Manufacturing Company is, however, different from that of most bankrupt corporations. With this company, the trouble was chiefly due to inadequate working capital which resulted in an excessive amount of funded debt calling for the payment of both principal and interest at a time when financing could not be done. The reorganization of the Westinghouse Company required nothing more than the funding of this current debt on which the company was abundantly able to pay interest. The stockholders' interest in the property was plain. Even during the receivership, the stock never fell below \$8.75, (par \$50) which indicated a considerable margin of value after the debts were paid.

In most cases, however, bankruptcy has been due to the failure of the company to earn interest on its funded debt. If the company cannot earn enough to pay interest on its bonds, then its property is not worth the amount of its debts, and there is nothing left for the stockholders. Their in-

terest in the property has, long before the reorganization, entirely disappeared. They have already been "wiped out." To stockholders in this situation a proposition that they should subscribe to stock in a new company at the rate of $10, $15, or $20 per share might be unattractive. The response of many stockholders to such a proposition would be an emphatic negative. They would inform the reorganization committee that they did not propose to throw good money after bad; that they did not care to make a new investment in the company with which they had fared so badly; that, although the claims of the reorganization committee as to the future of the company might be borne out by results, for their part, they would prefer to await the materialization of those results, rather than risk any more of their money in a venture which had proven so disastrous.

When money is to be raised from stockholders where there is no equity in the property which they would naturally desire to retain, the proposition has frequently been presented to them in a different form. Instead of being invited to subscribe to stock of a new company, the offer takes the form of a proposition that they should pay an "assessment" upon their stock, "go through the reorganization," and recover, in the increasing profits of the company, the losses which they have sustained. In the Chicago & Great Western reorganization plan, for example, the conditions of participation in the plan were set forth to the stockholders as follows:

"Participation under the plan by holders of the several classes of stock is dependent on the deposit of the stock certificates with the undersigned, within the period limited therefor. The plan embraces only the stocks so deposited. No certificate for any stock of any class will be received on deposit unless in negotiable form.

"Debenture Stock and Preferred Stock A are to be received without payment as stated in the Plan.

"Depositors of Preferred Stock B must pay $15 in respect of each share of such Preferred Stock B so deposited,

and will be entitled to obtain from the Syndicate mentioned in the Plan, Preferred Stock voting trust certificates of the New Company when issued, equal at par to such payment, and also Common Stock voting trust certificates of the New Company, when issued, to an aggregate amount at par equal to sixty per cent of the par value of their present Preferred Stock B so deposited.

"Depositors of Common Stock must pay $15 in respect of each share of such Common Stock so deposited, and will be entitled to obtain from the Syndicate, hereinafter mentioned, Preferred Stock voting trust certificates of the New Company, when issued, equal at par to such payment, and also Common Stock voting trust certificates of the new Company, when issued, to an aggregate amount at par equal to forty per cent of the par value of their present Common Stock so deposited."

A careful examination of this statement will show the difference in form, although not, as we shall see, in substance, between the proposition of an assessment and the proposition of a new subscription. The payments of cash are to be made *in respect of* and *in connection with* the deposit of common and preferred stock under the plan. The stockholder is informed that, if he will make a contribution on account of his present stockholdings, he will be allowed to receive stock in the new company. He does not, on the face of things, pay for the stock in the new company—that is given him in exchange for his old stock. He pays an "assessment" on his old stock, and, on account of this "assessment," he becomes entitled to receive new stock.

The proposition to the stockholders of the old company that they should subscribe to stock of the new company is put something as follows when a subscription is styled an assessment: "Your company is bankrupt; its creditors are in position to take the property, and they will take the property unless a certain amount of cash is raised. The creditors do not, however, desire to exclude stockholders from participa-

tion in the reorganization, but they must look to the stockholders to furnish the necessary money by paying a small assessment on the par value of their present holdings. If you will pay this assessment, you will be allowed to exchange your certificates of stock in the old company for a certain number of shares in the new company, and you will receive stock in addition to the amount of the assessment."

This proposition, it is evident, is precisely similar to the one first mentioned. It is an offer of stock in a new company. But, while many stockholders in a bankrupt and discredited corporation will not accept a proposition when presented to them as a subscription, when designated as an "assessment" on the stock which they already own, they have very generally accepted the proposition of reorganization committees, have paid their assessments, and received stock in the new concern. The second form of the subscription proposition appeals to the stockholders while the first does not. The "assessment" proposition presents to the stockholder the idea of an unfinished transaction. He hopes that, with one more effort, the payment of $10 or $15 per share, he can recover from the company the money which he has lost. The "assessment" proposition offers him apparently the opportunity to recoup himself, to justify to himself his judgment of the value of the stock in which, up to the present time, he has been so grievously disappointed. By employing this method of calling a subscription to stock in a new company an "assessment" on stock in an old company, reorganization committees have been able to obtain large amounts of money from stockholders, whereas if they had asked the stockholders to subscribe to stock in a new company, they would probably have been much less successful.

The assessments of stockholders are usually underwritten, a syndicate being organized to pay the "assessments," and to take the stock of those holders who do not participate in the plan. The commission paid to this syndicate varies, of course, with the risk which they assume, but the existence of the syndicate brings pressure to bear upon the stockholder

by assuring him that others stand ready to accept apparently the same terms which are offered to him. In 1895, for example, the final Atchison reorganization plan announced the following:

"A contract has been made with a syndicate to furnish an amount of money equal to the assessments of *nonassenting* or *defaulting stockholders,* and such syndicate, by such payment, shall take the place of the *nonassenting* or *defaulting stockholders,* and shall be entitled to receive the new common and preferred stock, which *nonassenting* or *defaulting stockholders* would have been entitled to receive if they had deposited their stock and paid their assessment in full." The syndicate may actually purchase the new stock and offer it to those stockholders who pay their assessments, thus making an exceptionally forcible appeal. By employing this method of approach, reorganization managers, especially in railway reorganizations, have been remarkably successful in paying off most of the floating debt without resorting to the sale of bonds.

The difference between a reorganization "assessment" and a subscription to new stock is only in form; in substance they are the same thing. When stock is full paid, it is not liable to any assessment. A stockholder may have only paid $20 a share for his full paid stock, but the corporation has no right to demand any more from him. Any further payments to the company are at his own pleasure. And yet, so imperfect is the knowledge possessed by the average stockholder of his rights and obligations, that he is apt to feel, when an assessment proposition is made to him, that there is an obligation to pay the assessment and take the new stock. A reorganization assessment is looked upon as compulsory. Stockholders are informed that if they refuse to pay they are "debarred from all participation in the reorganization," that they "lose all chance to recoup their loss from their share in subsequent profits."

An examination of a large number of reorganization

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[1] Italics are the author's.

plans recently promulgated, however, shows that "assessments" are now being stated in their true light as subscriptions. For example, the reorganization plan of the Newhouse Mines & Smelters under date of June 1, 1909, states that:

"In order to furnish the necessary working capital for development, payment of debts, expenses of foreclosure, reorganization and underwriting, the Stockholders will be required to subscribe to the capital stock of the new company and to pay one dollar for every share so subscribed. Every Stockholder so subscribing will receive one share of common stock of the New Company for each share now held by him."

It is impossible to approve the indirect method of raising money from stockholders, which is only recently being abandoned. The stockholder owes nothing to the reorganization managers, or to the creditors. If they secure his participation in the new company, they should make him an offer of a more attractive investment than he can obtain elsewhere. Unless the payment of an assessment on stock of a bankrupt corporation gives the stockholder, who desires to continue his interest in the company, the new stock at a lower figure than that at which he can purchase it in the open market, he should allow the creditors to advance the money necessary, and buy the stock after the reorganization has been completed. While by adopting such a course he may be "debarred from all participation in the reorganization," he does not "lose all chance to recoup his losses from his share in the subsequent prosperity." Dr. Stuart Daggett, in his book "Railroad Reorganization,"[1] gives a list of eight reorganizations in which the common stock was assessed, together with the price of the stock one month after reorganization, and six months after reorganization. In every case the stock could have been purchased in the open market directly after the reorganization at a lower price than it was purchased from the reorganization managers. It is desirable that stockholders should coöperate in making the reorganization plan

[1] P. 353.

a success, but the proposition should be presented to them in its true light, and not under the guise of an obligation or a necessity.

The offer to stockholders if foreclosure is not involved in the reorganization plan is usually more liberal than when the threat of foreclosure can be issued to induce subscriptions. If the method of foreclosure is not to be employed, then the stockholders must be persuaded into the subscription by an attractive offer. The adjustment plan of the Seaboard Air Line Railway, which was carried through without foreclosure, provided the cash required by the sale of $18,000,000 of par value of cumulative five per cent income bonds, called adjustment bonds. These were offered for subscription at seventy per cent of their par value to the extent of thirty per cent of the par value of their existing holdings. A syndicate was organized which, for a commission of five per cent on the par value of $18,000,000 of bonds, offered to the stockholders, guaranteed to purchase at this price any bonds that might not be subscribed and paid for by the stockholders. In this case there was no pressure put upon the stockholders to furnish any capital to the company. An attractive offer was made to them, and their acceptance of the offer was guaranteed by responsible bankers. Whether they subscribed or not, so far as the provision of cash was concerned, the success of the plan was assured.

If, or to the extent that stockholders will not advance money, the creditors must provide the funds required by subscribing to the securities of the new company. The creditors of a bankrupt company are potentially in the position of owners. They can obtain the property at a foreclosure sale, and if they cannot persuade or coerce the stockholders into advancing the money necessary for its rehabilitation, they will be obliged to take over the property, and themselves provide the necessary funds. Eliminating the stockholders, we have now to consider the methods by which creditors finance the cash requirements of a reorganization. Several conditions may be presented. There may be only one class of creditors,

the holders of mortgage bonds. The company issuing these bonds has defaulted, and receivers have been appointed. These receivers have made certain expenditures for the benefit of the property, and certain other expenditures are necessary. The stockholders will advance no more money. As the reorganization committee of the Arnold Print Works stated in their announcement of a plan of reorganization:

"Reorganization with fresh capital contributed by the present stockholders is impracticable, as nearly all the stock is owned by Messrs. Houghton & Gallup, and apart from their interest in this stock they are now without substantial means."

The creditors in such a situation must depend upon them selves. They organize a new company to take over the property, thereby extinguishing all rights of stockholders and any minor claims of current indebtedness which may be outstanding. They capitalize this new company according to the exigencies of the situation. They may subject its property to the lien of a first mortgage bond which they may either take themselves or sell to bankers, obtaining in this manner all necessary funds, or they may subscribe to the stock of a new company, placing no funded debt upon it. The property is at their disposal; they can use it to support the credit of the company as it may be necessary. If they advance the required funds themselves, they may arrange the capitalization of the new company in any way they see fit. If, however, they sell the securities to outsiders they must consult the wishes of the subscribers.

A case in point came recently under the writer's observation. A water-power company had underestimated the cost of a power and transmission plant. When the plant was little more than half completed, funds were exhausted. Receivers were appointed and the bondholders eventually bought in the plant at a foreclosure sale, eliminating the stock interest. It was now necessary to provide funds to complete the plant. The following plan, after prolonged negotiations, was presented to the bondholders. A new company should be

organized to take over the plant. This company was to issue first mortgage five per cent bonds to an amount sufficient to complete the plant, and certain of the bonds were to be held in reserve for extensions. The old bondholders were to receive noncumulative preferred stock for their bonds, and the new bonds were to carry with them all the common stock of the company as a bonus. The owners of the plant were offered the privilege of subscribing to the new bonds, and receiving their pro rata share of the common stock. The subscriptions to the bonds were guaranteed by a finance company, which undertook, for a commission, to take the bonds of nonsubscribing owners, and receive their share of the bonus of common stock.

Another condition may arise; there may be secured creditors and unsecured creditors, commonly known as floating debt creditors. We have already seen that when floating debt is amply secured by collateral, the reorganization plan must provide for its payment. It frequently happens, however, that the floating debt is unsecured. The Westinghouse Electric & Manufacturing Company at the time of its failure owed $5,000,000 for merchandise, and $8,000,000 to banks, for all of which there was no special security. In such a case, the holders of the floating debt, if the amount is large, in order to save something from the wreck, must advance the money required to put the company on its feet. They cannot ask the bondholders to make sacrifices, because, if the bondholders advance the necessary money, they may insist on retaining the stock of the new company. As for their own claims, the floating debt creditors, in case they manage the reorganization and provide the necessary funds, and in case, also, they do not disturb the position of the bondholders and safeguard the bondholders' interests in the reorganization, may arrange the capitalization of the new company as they please. In the Westinghouse reorganization, for example, already referred to, where the stockholders advanced the necessary funds, the holders of the company's notes, for fifty per cent of their claims, received convertible

five per cent debenture bonds of the company which were in its treasury, and for the other fifty per cent of their claims, fifteen-year five per cent notes of the company bearing five per cent interest. As for the banks, if they objected to waiting so long for repayment, they were offered the privilege of taking amounts equal to thirty per cent of their claims in serial bonds due in four, five, and six years, on condition that, for the balance of the fifty per cent, they should accept stock of the company at par. In this case the floating debt creditors were able to negotiate successfully with the stockholders, on account of the large equity in the property. If, however, the stockholders had not advanced the necessary funds, it would have been necessary for the holders of the floating debt to themselves subscribe to a sufficient amount of stock in the new company to provide the cash required, taking in addition stock for their own claims, and eliminating the stockholders.

Occasions may arise where the bondholders and the floating debt creditors, when no money can be obtained from stockholders, divide the burdens of the reorganization between them, and partition the stock of the company in return for their cash advances. Even if the bondholders are obliged to take charge of the reorganization, and arrange for the financing, they may not eliminate the floating debt creditors, on account of special reasons. It may be possible, for example, to arrange with some outside company to guarantee an issue of second mortgage bonds in return for the common stock. In such a case there would probably be no objection to the floating debt creditors receiving preferred stock in the reorganization plan without cash advances. As a rule, however, if the general creditors do not subscribe, and if suitable arrangements cannot be made with outside interests, then the bondholders must provide the money. They will usually take the stock of the new company, eliminating general creditors of the old company along with its stockholders.

A further complication enters when there are several

classes of bondholders, as well as different floating debt interests, and stockholders. Suppose stockholders will not advance money, that the general creditors are also unwilling to invest in the securities of the new company, that there are first mortgage bonds upon the property whose interest has been fully earned and paid by the receiver, but that, in addition to the first mortgage bonds, there are first and refunding bonds—that is, second mortgage bonds. There may be also debenture bonds and car trust certificates. In such a situation the underlying bonds and the car trust certificates cannot be disturbed. Their security is ample, and there is no way in which the reorganization committee can get at them. If any attempt is made to impose upon them the burden of providing the money required, they will assert their rights at foreclosure sale, taking away the security and eliminating all junior securities. The holders of car trust certificates are also in an exceptionally strong position; they cannot be asked to furnish any money. The holders of the junior bonds, with or without the participation of the stockholders, must here provide the necessary funds.

A case in point is that of the reorganization of the Western Maryland. In this reorganization plan, securities aggregating $50,951,950 remained undisturbed. Their owners were not called upon to provide any new money. The $8,274,160 of cash required for the payment of maturing obligations and for improvements and betterments was raised by the sale of $20,685,400 of the common stock of the company to a bankers' syndicate which offered this stock to the general lien and convertible holders and to the stockholders. The junior bondholders were offered the new stock at forty per cent, up to fifty per cent of their holdings, and the holders of the common stock were offered the new common stock at the same price, up to 100 per cent of their holdings. The undisturbed securities, in this case, included the first mortgage bonds, $42,518,000; divisional bonds, $6,200,000; leased line bonds, $1,659,300, and leased line guaranteed stock, $574,650. Interest on the first mortgage bonds had been fully earned, and there was no

reason for asking them to make sacrifices. The divisional and leased line bonds and guaranteed stock were so secured that an assertion by their holders of their rights under the contracts with the Western Maryland Railroad Company might have resulted in the disruption of the system. It was necessary, therefore, to appeal to the junior securities, and, in this case, the reorganization managers were fortunate in securing the coöperation of the stockholders. If the stockholders had not been able to respond, however, then it might have been necessary for the holders of the first mortgage bonds to have taken a part of the new stock, securing the coöperation of the general lien bondholders, if only to a partial extent, by allowing them to share in the new securities.

I have suggested only a few of the complications which may arise. A reorganization committee may be confronted with a great variety of situations. Its task is to obtain the money on the best terms possible with due regard to the legal rights of all interests concerned. The only rule which seems established in the preparation of this portion of a reorganization plan is first to impose the burden upon the stockholders if they can be induced to assume it, next in order to approach holders of unsecured floating debts, next the junior bondholders, and finally the holders of underlying securities. The appeal in each case is strengthened by the implied or express threat of complete loss to follow the foreclosure sale which would be controlled by the holders of the prior claims.

Finally, if money is to be raised from bankers or outside investors, a proposition must be made which is attractive to them. For example, if there are first mortgage bonds which cannot be disturbed, and if it is proposed to obtain the necessary funds without "compulsory" subscription by any of the old interests, by the sale of first and refunding mortgage bonds to a bankers' syndicate, the syndicate may insist upon a certain amount of stock. They may also insist that this stock shall be given special preference. In such a case, the new company would issue preferred stock A to bankers,

and the other interests would take B preferred and common stock.

We have already observed in the consideration of these several cases that the underwriting syndicate is a necessary feature in every reorganization plan. The commission paid to the syndicate will vary. In some cases it may be large. The Western Maryland Syndicate, we have seen, was to receive a commission of five per cent. In the reorganization plan of the United States Shipbuilding Company, the committee announced that it had entered into an agreement with the Morton Trust Company and Thomas F. Ryan for the purchase and sale of the entire issue of $3,000,000 collateral trust sinking fund six per cent bonds at a price of 87½, so as to guarantee the cash requirements of the plant. These bonds were offered by the syndicate to the holders of the existing bonds. The low price offered the chance of a large profit to the syndicate.

The needs of the present have now been provided for, current indebtedness has been paid, and provision has been made for sufficient capital to bring up the plant to a condition of efficiency. The committee on reorganization now addresses itself to the task of reducing fixed charges so that they will come well within conservative estimate of the net earnings. We have already discussed the method by which the limit of fixed charges in the new company is to be fixed. This limit is, as already pointed out, the minimum net earnings of the company. The amount is usually based on the experience of the receiver, although some allowance may be made for an anticipated improvement in earnings. For example, in the Atchison reorganization of 1894 it was estimated that the minimum earnings of the property from 1891 to 1894 were $5,204,880, and the fixed charges proposed for the new company were $4,528,547. The lowest net earnings which the Union Pacific had ever reported had been $4,315,077. The interest on the bonds issued by the new company which took over the property in 1897, was placed at $4,000,000; the net earnings for the Northern Pacific in 1895, the

smallest earnings for eight years, were $6,052,660; the fixed charges of its successor were placed at $6,015,846. Dr. Daggett,[1] in his summary of the results of a number of railroad reorganizations, states that the fixed charges in seven large reorganizations from 1893 to 1898 were reduced from $65,984,219 to $45,576,984. It is now well recognized that unless this principle of reducing fixed charges below the lowest point to which net earnings have ever fallen is followed, there is danger that the work will, at some later period of depression, have to be done over again. This principle was not recognized in many of the reorganizations prior to 1893. Since that time, however, it has been generally accepted and may now be taken as an almost invariable rule.

The fixed charges of a corporation may be divided into rental charges and interest charges. The charges for rentals can be more easily reduced than the charges for interest. As long as a company is solvent it must live up to its rental contracts. The contract is, however, made with the old company, and constitutes no lien upon its property. That is segregated for the protection of other creditors. The lessor is an unsecured creditor, and can be dealt with as such. The company which takes over the property at a foreclosure sale is entirely free from all the lease obligations of its predecessor. Bankruptcy has wiped out the score. The new company need assume only such contracts as its reorganizers consider to be necessary to its success. The receiver has usually terminated or modified unprofitable lease contracts, and the reorganization committee has only to follow in his footsteps. If a leased line has proven unprofitable, the reorganization committee can either dispense with it, or, if it is retained, its rental can be reduced. The reorganization committee has a free hand. They cannot be held to old agreements. Old contracts have lapsed and must be renewed by the new company before they can become binding upon it.

The history of railroad reorganization contains notable examples of the termination of lease contracts. The reorgan-

[1] "Railroad Reorganization," Stuart Daggett, p. 357.

ization of the Wabash in 1886 resulted in a reduction of 1,541 miles of leased lines, and the Richmond & West Point Terminal reorganization lopped off 4,479 miles. A more common method than the reduction of mileage is, however, the reduction of rentals. In the railway field, the owners of leased lines have usually no choice but to accede to any reasonable proposition of the reorganization committee for a reduction in their rentals. Their property is usually of little value outside of a large railway system, and, as a rule, the system with which it is most valuable is that with which it is already connected. From 1892 to 1898, the net reduction in lease rentals for American railways was $24,527,000, a large part of this representing reductions in reorganizations. A portion also represented the acquisition of leased lines, and the consequent conversion of rentals into interest.

We come now to the reduction of interest. Just as holders of some of the bonds may have been obliged to make sacrifices by subscribing to new securities, so they may also be required to sacrifice some of their claims for interest in order that the solvency of the new company may be secured. This reduction of interest is accomplished in the exchange of the securities of the old company for the securities of the new company. The methods by which such an exchange is accomplished have been already suggested. The new company offers its securities for subscription, in part in cash, and in part in the securities of the old company. If the old company has not been able to pay interest on $10,000,000 of second mortgage bonds, and if it is desired to eliminate this interest charge from the income account of the new company, the new company may offer the holders of the second mortgage bonds, $10,000,000 of preferred stock to be paid for with their bonds.

Some of the creditors of the old company must make sacrifices. Some of its bonds must be disturbed. Which bonds shall be disturbed? How shall their claims be modified and what compensation shall they be given for their sacrifices? Let us reverse the inquiry and ask what are the

bonds which are not disturbed in a reorganization? In every reorganization we find some of these bonds. Take the Erie, for example; it has five divisional mortgages ranging from first to fifth on portions of the line which lie within the State of New York. These mortgages have survived three reorganizations, not being disturbed by any of them. In the same way, the Norfolk & Western Railroad, the Reading, the Baltimore & Ohio, have carried through their reorganizations certain issues of bonds, without, in any way, disturbing them save, in some cases, to consolidate them by making attractive conversion offers into large issues. These bonds are safe from the reorganization committee for the reason that their interest, even in the worst years, has been fully earned. Even the receivers have recognized their claims and have paid their interest. Bonds secured by mortgages upon important branch roads, terminal property or equipment, do not suffer in a reorganization for the reason that there is no way to get at them. The property which secures them is indispensable to the company. Unless the rights of these holders are properly recognized they may inflict serious damage upon the system by seizing the property which secures their bonds.

It may, however, be necessary for the holders of first mortgage bonds, even though their interest has been fully earned, to subordinate their lien to the lien of a new first mortgage, without which the necessary money cannot be secured. Along with this sacrifice may also go a reduction in their interest claims. Speaking generally, however, the holders of first mortgage bonds whose interest has been earned, are not called upon to sacrifice their interest in reorganizations. In companies which present a complication of securities; first mortgages, divisional mortgages, general mortgages, debentures, etc., the sacrifices in interest are usually apportioned according to the extent to which the different bonds have participated in the net earnings of the company. The net earnings of the company are taken as the basis of the new fixed charges, and the reorganization com-

mittee apportions the net earnings among the various disturbed securities according to the amount which the property back of each security has contributed to the total. In so far as the interest on a bond has been earned, this absolute lien, as a rule, has been retained. In so far as its interest has not been earned, the bond is reduced to its true position as preferred stock, a form of security whose return is not guaranteed, but is conditioned on the future earnings of the company. The method employed in this reduction is illustrated by a statement made by the reorganization committee of the Atchison in the reorganization of 1895 with reference to the position of the general mortgage bonds in the reorganization:

"After making a careful estimate as to how much of the existing lines, if retained in the system, could, under the circumstances, be avoided, or if these lines be left out, what amount the Atchison system would be able to earn without the auxiliary lines, the committee has arrived at the conclusion that it would not be safe to place upon the property a fixed charge of more than four per cent upon seventy-five per cent of the principal of the present general mortgage bonds."

The situation of holders of general mortgage bonds whose interest has not been earned is here exactly stated. Since the company cannot earn their interest, they cannot, in reason, refuse to consent to a reduction of fixed income. Suppose they should refuse, what can they do? The only alternative is to foreclose the mortgage. To do this, they must raise enough cash to pay off all the prior liens, for their mortgage is spread over and is subordinate to the claims superior to their own. This is practically impossible, so their only course is to submit, after holding out, as long as possible, for better terms. It is true that there is always the final resort to the courts, who may, at any time before the recording of the new securities, hold up the whole proceeding by injunction. This will be done, if it can be shown to the

satisfaction of the court that any interest is being unjustly treated. Such interference, however, cannot, unless in cases of the most flagrant injustice, be secured by a minority. If a large majority of the bonds are deposited, the courts will usually refuse to interfere, holding that the consent of the majority should be binding upon all. The contest over the Erie reorganization in 1895 offers an illustration. A plan had been proposed which seemed unfair to the second mortgage bondholders. Nevertheless eighty per cent of these bonds had been deposited, when a suit was brought in the New York Superior Court to enjoin the company from recording the mortgage. The court refused to grant the injunction on the ground that the consent of so large a majority of the parties in interest had made the plan already operative, and as minority should not interfere.

The nature of preferred stock has already been fully explained. Dividends on the preferred stock are payable out of net earnings after the expenses of operation, repair and betterments, interest on the funded debt, rentals and taxes, the necessary cost of operating the business and keeping it out of the hands of the receiver, have been paid. The fixed charge of a mortgage bond whose interest must be paid, or foreclosure results, but which the company cannot earn in justice to its physical condition and under the circumstances of its business, is converted into a claim whose payment is conditioned upon the net earnings of the company. In the exchange of bonds on which interest is not earned, for preferred stock in the reorganized company, the relation of the former creditors to the property is defined precisely. The element of risk which they assumed when they purchased the junior lien bonds is exactly expressed in the contract which sets forth the relation of the preferred stockholder to the company.

The position of the junior bondholder is improved by the conversion of his bonds into preferred stock. Before the conversion, he is occasionally exposed to the risk of receivership which would depress the value of his securities, and cut off his income. By converting his junior lien bond into preferred

stock, he enables the company to preserve its solvency and improve its credit, and he places it in a position where it cannot only earn interest but pay him his preferred dividends. With the two exceptions of the Southern and the Erie, and these are only partial exceptions, the preferred stocks issued in the reorganizations referred to in the following table have paid dividends for many years. If they retain these stocks, the former bondholders have fully recovered the losses caused by the defaults which led to these reorganizations.

The extent to which the conversion of junior bonds into preferred stock was employed during the great railway reorganizations following the panic of 1893 is shown in the following table:

Name of Road	Amounts of Preferred Stock Issued			
	For Old Bonds	For Stock	For Assessments	Miscellaneous
Atchison, Topeka and Santa Fe	$96,740,000	....	$13,717,000	$9,200,000
Erie........ First preferred...	27,146,000	$8,537,000	....	2,854,000
Erie........ Second preferred	7,271,000		....	192,000
Norfolk and Western..........	22,833,000	....	....	167,000
Northern Pacific..............	54,880,000	17,620,000	....	2,500,000
Oregon Railway and Navigation Company................	9,290,000	....	1,440,000	270,000
Reading..... First preferred..	7,184,000	....	....	20,816,000
Reading..... Second preferred	40,286,000	....	....	1,714,000
St. Louis and San Francisco First preferred .	8,214,000	....	1,150,000	3,850,000
St. Louis and San Francisco Second preferred	8,214,000	....	....	7,786,000
Southern Railway.............	32,887,000	8,799,000	7,814,000	4,800,000
Totals....................	$314,945,000	$34,956,000	$24,121,000	$54,149,000

The bondholders may also be required to accept a lower rate of interest, or to postpone their interest altogether for a series of years, or to take a low rate of interest with a gradually ascending rate, or to receive a portion of their principal in mortgage bonds and the balance in some junior security. In most cases, the reorganization committee, as an inducement to security holders to accept a reduction in their claim for fixed interest, offers them a bonus in some other security. If general mortgage bondholders, for example, are asked to receive one half of the principal in first mortgage bonds

of the new company, and preferred stock for the balance, they may be given $500 in new first mortgage bonds and $750 or $1,000 in new preferred stock. The principal amount of their securities is, by this operation, increased. If the prospects of reviving business materialize, and the new management is efficient, the reorganization may prove to them to have been a blessing in disguise. An increase of capitalization is a feature which usually accompanies a reduction of fixed charges in the reorganization.

In concluding the discussion of the exchange of securities, two illustrations may be given, showing the distribution of the securities of the Northern Pacific and the Norfolk and Western in their respective reorganizations, both of which were accomplished in 1896.

An examination of these tables shows that so far as the specific security of the property back of each bond had contributed the amount of the interest on the bonds to the net earnings of the system, to that extent it was exchanged for

I. BASIS OF EXCHANGE OF THE SECURITIES OF THE NORFOLK & WESTERN RAILWAY IN THE REORGANIZATION OF 1896

Old Company	New Company			
Name of Security	Cash. Per Cent.	First Consolidated Mortgage Bonds. Per Cent.	Preferred Stock. Per Cent.	Common Stock. Per Cent.
Adjustment mortgage, seven per cent bonds	7	130	20	.....
One hundred year mortgage bonds	.....	62½	75	.....
Maryland and Washington Division bonds	.....	70	67½	.....
Chester Valley Division bonds	.....	50	70	
Equipment mortgage bonds, 1888	.....	100	48	.....
Five hundred and ninety debentures of 1892	.....	.....	100	.....
Roanoke and Southern Railway bonds	.....	55	65	.....
Lynchburg and Durham Railway bonds	.....	35	65	.....
Norfolk and Western common (Assessment $12.50 per share)	.....	.....	.....	75
Norfolk and Western preferred (Assessment $12.50 per share)				112½
Roanoke and Southern Stock (Assessment $12.50 per share)				75
Lynchburg and Durham Stock (Assessment $12.50 per share)				75

II. BASIS OF EXCHANGE OF THE SECURITIES OF THE NORTHERN PACIFIC IN THE REORGANIZATION OF 1896

Old Company	New Company				
Name of Security	Cash. Per Cent.	New Prior Lien Mortgage Bonds. Per Cent.	New General Lien. Mortgage Bonds. Per Cent.	Preferred Stock Trust Certificates. Per Cent.	Common Stock Trust Certificates. Per Cent.
General first mortgage bonds	3	135	.....	.....	.....
General second mortgage bonds	4	118½	.....	50	.....
General third mortgage bonds	3	.....	118½	50	.....
Dividend certificates	3	.....	118	50	.....
Consolidated mortgage bonds	1½	.....	66½	62½	.....
Collateral trust notes	.....	100	.....	20	.....
Northwest equipment stock	100	.....	.....	.....	.....
Depositors of preferred stock on payment of $10 per share	.....	.....	.....	50	50
Depositors of common stock on payment of $15 per share	.....	.....	.....	.....	100

new mortgage bonds. In so far as its interest had not been earned, preferred stock was given, usually to an amount greater than the par value of the securities which it displaced. The principle of apportionment is especially well illustrated in the Norfolk & Western reorganization. The bonds of four branch roads were disturbed. Of these, the Maryland and Washington, and Roanoke, and Southern had earned more than the other two, and their greater earning ability was recognized in larger proportions of preferred stock. The 100-year mortgage bonds also, whose interest had not been fully earned, were cut down 25 per cent, but 55 per cent in first preferred stock was given in exchange, so that in the long run the bondholders were no losers, the preferred stock in 1898 having sold for 63⅝. In the same way, the holders of the consolidated mortgage bonds of the Northern Pacific received 62½ per cent in new prior lien bonds, and 62½ per cent in preferred stock. In 1895, before the reorganization, the consolidated bonds did not rise above 36, while in December, 1898, two years after the reorganization, the prior lien bonds sold for

93, and the preferred stock for 78. In exchange for a bond worth $360, the Northern Pacific bondholders received another bond worth, two years later, $642, besides $780 in preferred stock.

One more feature of reorganization plans demands attention. The bondholders have controlled the reorganization and have made sacrifices in order that the plan might be successful. They insist, as a condition of their participation, that they should receive some guarantee of the quality of the management. The stock of the new company, if placed upon the market, will command a low figure. It may fall into the hands of speculators who may exploit the property for their own benefit. The bondholders fear that they may have another default to suffer, another floating debt to take care of. To guard against this danger, it is almost invariably provided that the stock of the reorganized company shall be placed for a series of years in the hands of trustees who will issue to the holders securities of beneficial interest in any dividends which may be paid on the stock, the voting power, however, remaining with the trustees.

The nature of a voting trust provision is indicated by the following extract from the reorganization plan of the Pope Manufacturing Company:

"All of the stock of the new company except directors' qualifying shares will be issued to voting trustees, who shall issue to the various persons entitled to receive said stock suitable certificates containing an agreement to deliver said stock on or after August 1, 1911, or sooner if the voting trustees shall so determine, and in the meantime to pay to such persons an amount equal to any sums received as dividends upon said shares of stock. During the continuance of the aforesaid voting trust (1) no mortgage shall be put upon the property (other than the mortgage herein referred to) except with the consent of the holders of two thirds in amount of each class of stock; (2) the amount of preferred stock shall not be increased except with the consent of the

holders of three fourths in amount of the certificates representing preferred stock and the holders of two thirds in amount of certificates representing common stock; (3) the amount of common stock shall not be increased except with the consent of the holders of two thirds in amount of the certificates representing preferred stock and the holders of two thirds in amount of the certificates representing common stock."

By this provision, not only were the interests of creditors safeguarded by the placing of control for a period of three years in the hands of trustees, but the stockholders were assured against any abuse of their power by the voting trustees.

These voting trust certificates, when issued on behalf of large public corporations, are listed on the public exchanges, and are dealt in exactly as are shares of stock. The voting trustees are usually named by the banking firm which carries through the reorganization. They represent primarily the creditors' interest. Their administration has been generally successful and they have materially assisted in restoring to public confidence the corporations for whose management they have been made responsible.

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